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NEWS
                 "Ask CAS" for self-help around the clock
                 INSPEC enhanced with 1898-1968 archive
NEWS
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                 ADISCTI Reloaded and Enhanced
NEWS 4
        AUG 28
NEWS
    5 AUG 30
                 CA(SM)/CAplus(SM) Austrian patent law changes
         SEP 11
NEWS
                 CA/CAplus enhanced with more pre-1907 records
         SEP 21
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     7
                 CA/CAplus fields enhanced with simultaneous left and right
                 truncation
NEWS
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         SEP 25
                 CA(SM)/CAplus(SM) display of CA Lexicon enhanced
NEWS
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                 CAS REGISTRY(SM) no longer includes Concord 3D coordinates
         SEP 25
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                 CAS REGISTRY(SM) updated with amino acid codes for pyrrolysine
         SEP 28
NEWS 11
                 CEABA-VTB classification code fields reloaded with new
                 classification scheme
NEWS 12
         OCT 19
                 LOGOFF HOLD duration extended to 120 minutes
NEWS 13
         OCT 19
                 E-mail format enhanced
NEWS 14
         OCT 23
                 Option to turn off MARPAT highlighting enhancements available
NEWS 15
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                 CAS Registry Number crossover limit increased to 300,000 in
                 multiple databases
NEWS 16
         OCT 23
                 The Derwent World Patents Index suite of databases on STN
                 has been enhanced and reloaded
NEWS 1.7
         OCT 30
                 CHEMLIST enhanced with new search and display field
NEWS 18
         NOV 03
                 JAPIO enhanced with IPC 8 features and functionality
NEWS 19
         NOV 10
                 CA/CAplus F-Term thesaurus enhanced
NEWS 20
         NOV 10
                 STN Express with Discover! free maintenance release Version
                 8.01c now available
         NOV 13
NEWS 21
                 CA/CAplus pre-1967 chemical substance index entries enhanced
                 with preparation role
         NOV 20
NEWS 22
                 CAS Registry Number crossover limit increased to 300,000 in
                 additional databases
NEWS 23
         NOV 20
                 CA/CAplus to MARPAT accession number crossover limit increased
                 to 50,000
NEWS 24
        NOV 20
                 CA/CAplus patent kind codes will be updated
         DEC 01
NEWS 25
                 CAS REGISTRY updated with new ambiguity codes
NEWS 26
         DEC 11
                 CAS REGISTRY chemical nomenclature enhanced
NEWS 27
         DEC 14
                 WPIDS/WPINDEX/WPIX manual codes updated
NEWS 28
         DEC 14
                 GBFULL and FRFULL enhanced with IPC 8 features and
                 functionality
NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT
```

MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),

STN Operating Hours Plus Help Desk Availability

Welcome Banner and News Items

AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.

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NEWS HOURS

#### 10568380.trn

NEWS IPC8 For general information regarding STN implementation of IPC 8
NEWS X25 X.25 communication option no longer available

Enter NEWS followed by the item number or name to see news on that specific topic.

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=> FILE REGISTRY

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 15:07:10 ON 14 DEC 2006
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STRUCTURE FILE UPDATES: 13 DEC 2006 HIGHEST RN 915360-23-5 DICTIONARY FILE UPDATES: 13 DEC 2006 HIGHEST RN 915360-23-5

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Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/reqprops.html

=>
Uploading C:\Program Files\Stnexp\Queries\10568380.str

15:1412/14/2006Page 2

chain nodes :

12 13 14 15 16 17 18 19 20

ring nodes :

1 2 3 4 5 6 7 8 9 10 11

chain bonds :

2-10 4-16 5-12 12-13 12-19 13-14 13-15 14-20 16-17 16-18

ring bonds :

1-2 1-5 2-3 3-4 4-5 6-7 6-11 7-8 8-9 9-10 10-11

exact/norm bonds :

5-12 12-13 13-14 13-15 16-17 16-18

exact bonds :

1-2 1-5 2-3 2-10 3-4 4-5 4-16 12-19 14-20

normalized bonds :

6-7 6-11 7-8 8-9 9-10 10-11

isolated ring systems :

containing 1 : 6 :

## Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS

# L1 STRUCTURE UPLOADED

=> D L1

L1 HAS NO ANSWERS

L1 STR

#### 10568380.trn

Structure attributes must be viewed using STN Express query preparation.

=> S L1

SAMPLE SEARCH INITIATED 15:07:24 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 43 TO ITERATE

100.0% PROCESSED

43 ITERATIONS

22 ANSWERS

550 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS:

467 TO 1253

PROJECTED ANSWERS:

159 TO 721

L2

22 SEA SSS SAM L1

=> S L1 SSS FULL

FULL SEARCH INITIATED 15:07:31 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 1005 TO ITERATE

100.0% PROCESSED

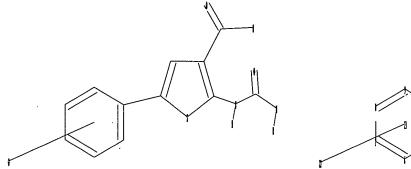
1005 ITERATIONS

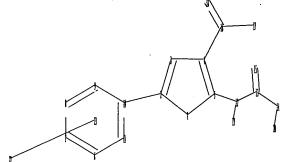
SEARCH TIME: 00.00.01

L3

550 SEA SSS FUL L1

Uploading C:\Program Files\Stnexp\Queries\10568380a.str





chain nodes :

12 13 14 15 16 17 18 19 20

ring nodes :

1 2 3 4 5 6 7 8 9 10 11

chain bonds :

2-10 4-16 5-12 12-13 12-19 13-14 13-15 14-20 16-17 16-18

ring bonds :

1-2 1-5 2-3 3-4 4-5 6-7 6-11 7-8 8-9 9-10 10-11

exact/norm bonds :

5-12 12-13 13-14 13-15 16-17 16-18

exact bonds :

1-2 1-5 2-3 2-10 3-4 4-5 4-16 12-19 14-20

normalized bonds :

6-7 6-11 7-8 8-9 9-10 10-11

isolated ring systems :

containing 1 : 6 :

15:1412/14/2006Page 4

Match level :

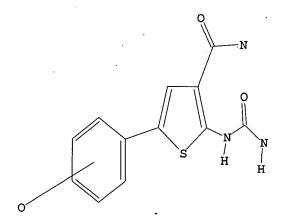
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 22:CLASS 23:Atom

L4 STRUCTURE UPLOADED

=> d 14

L4 HAS NO ANSWERS

L4 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 14

L5

SAMPLE SEARCH INITIATED 15:09:31 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 43 TO ITERATE

100.0% PROCESSED

43 ITERATIONS

14 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS:

467 TO 1253

PROJECTED ANSWERS:

56 TO 504

14 SEA SSS SAM L4

=> s l4 sss full

FULL SEARCH INITIATED 15:09:38 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1005 TO ITERATE

100.0% PROCESSED

1005 ITERATIONS

SEARCH TIME: 00.00.01

271 SEA SSS FUL L4

=> FIL HCAPLUS

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COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 335.20 335.41

FULL ESTIMATED COST

FILE 'HCAPLUS' ENTERED AT 15:10:08 ON 14 DEC 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 14 Dec 2006 VOL 145 ISS 25 FILE LAST UPDATED: 13 Dec 2006 (20061213/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

L1

L2

L3 L4

L5

(FILE 'HOME' ENTERED AT 15:06:48 ON 14 DEC 2006)

FILE 'REGISTRY' ENTERED AT 15:07:10 ON 14 DEC 2006
STRUCTURE UPLOADED

22 S L1
550 S L1 SSS FULL
STRUCTURE UPLOADED

14 S L4

L6 271 S L4 SSS FULL

FILE 'HCAPLUS' ENTERED AT 15:10:08 ON 14 DEC 2006

=> s 17 and p/dt 5534189 P/DT

L9 13 L7 AND P/DT

=> s 19 and us/pc 1616988 US/PC L10 6 L9 AND US/PC

=> d 18 ibib abs hitstr tot

L8 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2006:469629 HCAPLUS

# 10568380.trn

```
DOCUMENT NUMBER:
                          144:488936
TITLE:
                          Preparation of amino acid aryl or heteroaryl
                          derivatives as glycogen phosphorylase inhibitors
INVENTOR(S):
                          Evans, Karen; Cichy-Knight, Maria; Coppo, Frank Teen;
                          Dwornik, Kate Ann; Gale, Jennifer Paul; Garrido, Dulce
                          Maria; Li, Yue Hu; Patel, Mehul P.; Tavares, Francis
                          X.; Thomson, Stephen Andrew; Dickerson, Scott Howard;
                          Peat, Andrew James; Sparks, Steven Meagher; Banker,
                          Pierette; Cooper, Joel P.
                          Smithkline Beecham Corporation, USA
PATENT ASSIGNEE(S):
                          PCT Int. Appl., 681 pp.
SOURCE:
                          CODEN: PIXXD2
DOCUMENT TYPE:
                          Patent
LANGUAGE:
                          English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                        KIND
                                 DATE
                                              APPLICATION NO.
                                                                     DATE
     WO 2006052722
                           A1
                                 20060518
                                              WO 2005-US39956
                                                                     20051104
         W: AE, AG, AL, AM, AT, ALL AZ BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
             KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
             MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
             SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
             VN, YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.:
                                              US 2004-626389P
                                                                  P 20041109
OTHER SOURCE(S):
                          MARPAT 144:488936
     The invention relates to compds. R-Ar-NR1CO-X-Ar' [R is CO2H or carbamoyl
     which may be substituted by alkyl, aryl, carboxyalkyl, etc.; Ar is an
     aromatic, heteroarom., cycloaliph. or heterocyclic ring which may fused to an
     aromatic or heteroarom. ring; X is carbon, nitrogen, oxygen or sulfur; Ar' is
     an aromatic or heteroarom. ring; R1 is H or alkyl] or their
     pharmaceutically-acceptables salts, which are inhibitors of glycogen
     phosphorylase and can be used to treat diabetes, conditions associated with
     diabetes, or tissue ischemia, including myocardial ischemia. Thus,
     N-[3-[[[(2,6-dimethylphenyl)amino]carbonyl]amino]-2-naphthoyl]-L-aspartic
     acid was prepared by treating L-Asp(tBu)-Wang Resin with
     3-amino-2-naphthalenecarboxylic acid and then 2,6-dimethylphenyl
     isocyanate. The product showed IC50 = 0.46 \mu M for inhibition of
     glycogen phosphorylase.
IT
     887241-34-1P 887241-42-1P 887241-44-3P
     887241-46-5P 887241-48-7P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (preparation of amino acid aryl or heteroaryl derivs. as glycogen
        phosphorylase inhibitors)
RN
     887241-34-1 HCAPLUS
CN
     Cyclohexaneacetic acid, \alpha - [[2 - [[(2, 6 - dichlorophenyl)amino]carbonyl]]
     ]amino]-5-(3-methoxyphenyl)-3-thienyl]carbonyl]amino]-, (\alphaS)- (9CI)
     (CA INDEX NAME)
```

RN 887241-42-1 HCAPLUS

CN Cyclohexaneacetic acid,  $\alpha$ -[[[5-(4-methoxyphenyl)-2-[[[(2,4,6-trimethylphenyl)amino]carbonyl]amino]-3-thienyl]carbonyl]amino]-, ( $\alpha$ S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 887241-44-3 HCAPLUS

CN Cyclohexaneacetic acid,  $\alpha$ -[[[2-[[[[2,6-dichloro-4-(trifluoromethoxy)phenyl]amino]carbonyl]amino]-5-(4-methoxyphenyl)-3-thienyl]carbonyl]amino]-, ( $\alpha$ S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 887241-48-7 HCAPLUS Cyclohexaneacetic acid,  $\alpha$ -[[[5-[4-(trifluoromethoxy)phenyl]-2-[[[(2,4,6-trimethylphenyl)amino]carbonyl]amino]-3-thienyl]carbonyl]amino]-, ( $\alpha$ S)- (9CI) (CA INDEX NAME)

$$_{\rm F_3C}$$
 $_{\rm NH}$ 
 $_{\rm NH}$ 
 $_{\rm NH}$ 
 $_{\rm NH}$ 
 $_{\rm NH}$ 
 $_{\rm CO_2H}$ 

IT 887247-43-0P 887247-52-1P 887249-64-1P

887249-67-4P 887249-69-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of amino acid aryl or heteroaryl derivs. as glycogen phosphorylase inhibitors)

RN 887247-43-0 HCAPLUS

CN Cyclohexaneacetic acid,  $\alpha - [[2-[[(2,6-dichlorophenyl)amino]carbonyl]amino]-5-(3-methoxyphenyl)-3-thienyl]carbonyl]amino]-, methyl ester, <math>(\alpha S)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 887247-52-1 HCAPLUS

CN Cyclohexaneacetic acid,  $\alpha - [[5-(4-methoxyphenyl)-2-[[(2,4,6-trimethylphenyl)amino]carbonyl]amino]-3-thienyl]carbonyl]amino]-, methyl ester, <math>(\alpha S)$ - (9CI) (CA INDEX NAME)

RN 887249-64-1 HCAPLUS

CN Cyclohexaneacetic acid,  $\alpha-[[[2-[[[[2,6-dichloro-4-(trifluoromethoxy)phenyl]amino]carbonyl]amino]-5-(4-methoxyphenyl)-3-thienyl]carbonyl]amino]-, methyl ester, (<math>\alpha$ S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 887249-67-4 HCAPLUS

CN Cyclohexaneacetic acid,  $\alpha$ -[[[2-[[[[2,6-dichloro-4-(trifluoromethoxy)phenyl]amino]carbonyl]amino]-5-[4-(trifluoromethoxy)phenyl]-3-thienyl]carbonyl]amino]-, methyl ester, ( $\alpha$ S)- (9CI) (CA INDEX NAME)

RN 887249-69-6 HCAPLUS

CN Cyclohexaneacetic acid,  $\alpha$ -[[[5-[4-(trifluoromethoxy)phenyl]-2-[[[(2,4,6-trimethylphenyl)amino]carbonyl]amino]-3-thienyl]carbonyl]amino]-, methyl ester, ( $\alpha$ S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

Inventor

L8 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2006 ACS On STN ACCESSION NUMBER: 2005:638873 HCAPLUS

18

DOCUMENT NUMBER: 143:153276

TITLE: Preparation of substituted heterocycles, particularly ureidothiophenes, as CHK1 kinase inhibitors for

INVENTOR(S): Ashwell, Susan; Ge

Ashwell, Susan; Gero, Thomas; Ioannidis, Stephanos; Janetka, James; Lyne, Paul; Su, Mei; Toader, Dorin; Dingwei; Yu, Yan

15:1412/14/2006Page 12

### 10568380.trn

PATENT ASSIGNEE(S):

Astrazeneca AB, Swed.; Astrazeneca UK Limited

PCT Int. Appl., 148 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE WO 2005066163 A2 20050721 WO 2004-GB5400 20041224 WO 2005066163 (A3 20050901 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, LK, LK, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG AU 2004312193 Α1 20050721 AU 2004-312193 20041224 CA 2552050 AΑ 20050721 CA 2004-2552050 20041224 NO 2006003449 NO 2006-3449 Α 20060727 20060726 PRIORITY APPLN. INFO.: US 2004-534310P Р 20040105 US 2004-553305P Р 20040315 WO 2004-GB5400 W 20041224 OTHER SOURCE(S):

MARPAT 143:153276

GΙ

ABTitle compds. I [wherein X = NH, S, O; Y = CH, N; R1 = CN, (un) substituted alk(en)yl, alkoxy, aryl, etc.; R2, R3 = independently CONH2 and derivs., SO2NH2 and derivs., NHCONHR4; R4 = H, OH, benzyl, etc.; and their pharmaceutically acceptable salts; provided that when X = S; Y = CH; R2 = CONH2 and derivs.; and R3 = NHCONHR4; then R1 cannot be hydroxyphenyl or

#### 10568380.trn

alkoxyphenyl; with the exception of certain compds.] were prepared as

checkpoint kinase 1 inhibitors for treating cancer. For example, a 7-step synthesis of ureidothiophene salt II.HCl, starting from phenylacetaldehyde and cyanomethyl acetate, is given. I had IC50 or EC50  $\leq$  100  $\mu M$  in one or both, checkpoint kinase 1 and abrogation assavs. 860352-21-2P 860352-39-2P 860352-58-5P 860352-70-1P, 5-(3-Fluoro-4-methoxyphenyl)-2-ureidothiophene-3carboxylic acid (S)-azepan-3-ylamide 860352-74-5P 860352-76-7P, 5-(2,4-Dimethoxyphenyl)-2-ureidothiophene-3carboxylic acid (S)-azepan-3-ylamide 860352-80-3P 860352-81-4P 860352-82-5P, 5-(5-Chloro-2-methoxyphenyl) -2-ureidothiophene-3-carboxylic acid (S)-azepan-3-ylamide 860352-83-6P, 5-(2,5-Dimethoxyphenyl)-2-ureidothiophene-3carboxylic acid (S)-azepan-3-ylamide 860352-85-8P, 5-(5-Fluoro-2-methoxyphenyl)-2-ureidothiophene-3-carboxylic acid (S)-azepan-3-ylamide 860352-87-0P 860352-88-1P 860352-89-2P 860353-71-5P, 5-(3,4-Dimethoxyphenyl)-2ureidothiophene-3-carboxylic acid N-(piperidin-4-yl)amide 860353-75-9P, 5-(3,4-Dimethoxyphenyl)-2-ureidothiophene-3carboxylic acid (S)-azepan-3-ylamide 860353-87-3P, 5-(3,4-Dihydroxyphenyl)-2-ureidothiophene-3-carboxylic acid N-(piperidin-4-yl)amide 860353-88-4P, 4-[[[5-(3,4-Dimethoxyphenyl) -2-ureidothien-3-yl]carbonyl]amino]piperidine-1-carboxylic acid tert-butyl ester RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (drug candidate; preparation of ureidothiophenes as CHK1 kinase inhibitors for treating neoplasm) RN 860352-21-2 HCAPLUS CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(3,4-dimethoxyphenyl)-N-(3S)-3-piperidinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 860352-39-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-fluoro-2-hydroxyphenyl)-N-(3S)-3-piperidinyl- (9CI) (CA INDEX NAME)

RN 860352-58-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(2,4-dimethoxyphenyl)-N-(3S)-3-piperidinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 860352-70-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(3-fluoro-4-methoxyphenyl)-N-[(3S)-hexahydro-1H-azepin-3-yl]- (9CI) (CA INDEX NAME)

RN 860352-74-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3-fluoro-4-(phenylmethoxy)phenyl]-N-(3S)-3-piperidinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 860352-76-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(2,4-dimethoxyphenyl)-N-[(3S)-hexahydro-1H-azepin-3-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 860352-80-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(3,5-difluoro-4-methoxyphenyl)-N-(3S)-3-piperidinyl- (9CI) (CA INDEX NAME)

RN 860352-81-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-fluoro-4-(phenylmethoxy)phenyl]-N-(3S)-3-piperidinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 860352-82-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(5-chloro-2-methoxyphenyl)-N-[(3S)-hexahydro-1H-azepin-3-yl]- (9CI) (CA INDEX NAME)

RN 860352-83-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(2,5-dimethoxyphenyl)-N[(3S)-hexahydro-1H-azepin-3-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 860352-85-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(5-fluoro-2-methoxyphenyl)-N-[(3S)-hexahydro-1H-azepin-3-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 860352-87-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-N-(3S)-3-piperidinyl-5-(2,3,4-trimethoxyphenyl)- (9CI) (CA INDEX NAME)

RN 860352-88-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(5-chloro-2-methoxyphenyl)-N-(3S)-3-piperidinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 860352-89-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-fluoro-2-(phenylmethoxy)phenyl]-N-(3S)-3-piperidinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 860353-71-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(3,4-dimethoxyphenyl)-N-4-piperidinyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{OMe} \\ \text{S} \\ \text{NH-C-NH}_2 \\ \\ \text{C} \\ \text{O} \\ \\ \text{NH} \\ \\ \text{H} \end{array}$$

RN 860353-75-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(3,4-dimethoxyphenyl)-N-[(3S)-hexahydro-1H-azepin-3-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 860353-87-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(3,4-dihydroxyphenyl)-N-4-piperidinyl- (9CI) (CA INDEX NAME)

RN 860353-88-4 HCAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[2-[(aminocarbonyl)amino]-5-(3,4-dimethoxyphenyl)-3-thienyl]carbonyl]amino]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:158658 HCAPLUS

DOCUMENT NUMBER: 14

ANSWER 3 OF 7

TITLE:

INVENTOR(S):

SOURCE:

Г8

Preparation of thisphene compounds as CHK1 inhibitors Ashwell, Susan; Gerb, Thomas; Ioannidis, Stophanos;

marker

Janetka, James, Lyne, Paul; Oza, Vibha; Springer,

Stophanie; Su, Mei; Yu, Dingwei

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.; Astrazeneca UK Limited

PCT Int. Appl., 97 pp.

CODEN: PIXXD2

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PATENT NO.
                                 DATE
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     WO 2005016909
                                 2005022
                                              WO 2004-GB3473
                                                                      20040812
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             CN, CO, CR
                          CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
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             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
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             SN, TD, TG
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                                 20050224
                                              AU 2004-265140
                                                                      20040812
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                                              CA 2004-2535652
                                                                       20040812
                                           EP 2004-768043
     EP 1660474
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                                                                      20040812
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     BR 2004013585
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                               20061017
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                                              NO 2006-718
                              20060301
                                                                      20060214
                                              US 2003-495580P P 20030815
US 2004-576416P P 20040528
WO 2004-GB3473 W 20040812
PRIORITY APPLN. INFO.:
OTHER SOURCE(S):
                        MARPAT 142:261391
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$$_{
m R5-O}$$
 $_{
m NR}1_{
m R2}$ 
 $_{
m NH}$ 
 $_{
m NH}$ 
 $_{
m R4}$ 
 $_{
m I}$ 

#### 10568380.trn

AB Title compds. I [R1, R2 = H, (un) substituted alkyl, (un) substituted heterocyclyl; with proviso that R1 and R2 are not both H; or R1 and R2 and the N to which they are attached in combination form an optionally substituted heterocyclyl; R4 = H, OH, (un) substituted carbocyclyl, etc.; R5 = H, (un) substituted carbocyclyl, (un) substituted alkyl] and their pharmaceutically acceptable salts were prepared For example, amidation of compound II with (CH3) 2A1-3-BOC-(S)-3-aminopiperidine, e.g., in-situ prepared by reaction of (S)-3-aminopiperidine-1-carboxylic acid tert-Bu ester with (CH3) 3A1, followed by acidic deprotection afforded compound I [NR1R2 = (S)-piperidin-3-ylamino; R4 = H; OR5 = 4-MeO]·HCl in 57% overall yield. In CHK 1 (checkpoint kinase 1) inhibition assays, the IC50 value of compound I [NR1R2 = piperidin-3-ylamino; R4 = H; OR5 = 4-Et2NCH2CH2O]·CF3CO2H was 10 nM. Compds. I are claimed useful for the treatment of cancer, infection.

IT 845888-64-4

RL: PAC (Pharmacological activity); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses) (preparation of thiophene compds. as CHK1 inhibitors for treatment of cancer, infection)

RN 845888-64-4 HCAPLUS

CN 1-Piperidinecarboxylic acid, 3-[[[2-[(aminocarbonyl)amino]-5-[4-[2-(diethylamino)ethoxy]phenyl]-3-thienyl]carbonyl]amino]-, 1,1-dimethylethylester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ΙT 845887-64-1P 845887-66-3P 845887-68-5P 845887-69-6P 845887-71-0P 845887-72-1P 845887-73-2P 845887-77-6P 845887-79-8P 845887-80-1P 845887-82-3P 845887-84-5P 845887-85-6P 845887-86-7P 845887-88-9P 845887-90-3P 845887-92-5P 845887-93-6P 845887-95-8P 845887-96-9P 845887-97-0P 845887-98-1P 845887-99-2P 845888-00-8P 845888-01-9P 845888-02-0P 845888-03-1P 845888-04-2P 845888-05-3P 845888-06-4P 845888-07-5P 845888-08-6P 845888-09-7P 845888-10-0P 845888-11-1P 845888-12-2P 845888-13-3P 845888-14-4P 845888-15-5P 845888-16-6P 845888-17-7P 845888-18-8P 845888-19-9P 845888-20-2P 845888-21-3P 845888-22-4P 845888-23-5P 845888-24-6P 845888-25-7P 845888-26-8P 845888-27-9P 845888-28-0P 845888-29-1P 845888-30-4P 845888-31-5P 845888-32-6P 845888-33-7P 845888-34-8P 845888-35-9P 845888-36-0P 845888-37-1P 845888-38-2P 845888-40-6P

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845888-41-7P 845888-42-8P 845888-43-9P
     845888-46-2P 845888-47-3P 845888-48-4P
     845888-49-5P 845888-50-8P 845888-51-9P
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     845888-85-9P 845888-86-0P 845888-87-1P
     845888-88-2P 845888-89-3P 845888-90-6P
     845888-91-7P 845888-92-8P 845888-93-9P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (preparation of thiophene compds. as CHK1 inhibitors for treatment of
        cancer, infection)
     845887-64-1 HCAPLUS
RN
CN .
     1-Piperidinecarboxylic acid, 3-[[[2-[(aminocarbonyl)amino]-5-[4-[2-
     (diethylamino) ethoxy]phenyl] -3-thienyl]carbonyl]amino] -, 1,1-dimethylethyl
     ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)
     CM
     CRN
          845887-63-0
     CMF
          C28 H41 N5 O5 S
```

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 845887-66-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(diethylamino)ethoxy]phenyl]-N-3-piperidinyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 845887-65-2 CMF C23 H33 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 845887-68-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3-[2-(diethylamino)ethoxy]phenyl]-N-3-piperidinyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM :

CRN 845887-67-4 CMF C23 H33 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 845887-69-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(3S)-3-piperidinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845887-71-0 HCAPLUS

CN 1-Piperidinecarboxylic acid, 3-[[[2-[(aminocarbonyl)amino]-5-[3-[2-(diethylamino)ethoxy]phenyl]-3-thienyl]carbonyl]amino]-, 1,1-dimethylethyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 845887-70-9 CMF C28 H41 N5 O5 S

$$\begin{array}{c} \text{Et}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{O} \\ \text{C} \\ \text{C} \\ \text{O} \\ \text{NH} \\ \text{C} \\$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

CN

RN 845887-72-1 HCAPLUS

3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(diethylamino)ethoxy]phenyl]-N-4-piperidinyl- (9CI) (CA INDEX NAME)

RN 845887-73-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-N-[(3R)-hexahydro-1H-azepin-3-yl]-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 845887-77-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(diethylamino)ethoxy]phenyl]-N-[3-(hydroxymethyl)phenyl]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 845887-76-5 CMF C25 H30 N4 O4 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 845887-79-8 HCAPLUS

CN

3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3-[2-(diethylamino)ethoxy]phenyl]-N-4-piperidinyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 845887-78-7 CMF C23 H33 N5 O3 S

$$\begin{array}{c} \text{Et}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{O} \\ \\ \text{C} \\ \text{O} \\ \\ \text{NH} \\ \\ \text{H} \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 845887-80-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-N-(2-aminoethyl)-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & \\ & & \\ H_2N-CH_2-NH-C \\ & & \\ & & \\ & & \\ & & \\ & & \\ \end{array}$$

RN 845887-82-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-4-piperidinyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 845887-81-2 CMF C18 H22 N4 O3 S

$$\begin{array}{c} \text{MeO} & \text{O} \\ \\ \text{S} \\ \text{NH} - \text{C} - \text{NH}_2 \\ \\ \text{C} = \text{O} \\ \\ \text{NH} \\ \\ \text{H} \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 845887-84-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3-[2-(diethylamino)ethoxy]phenyl]-N-3-pyridinyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 845887-83-4

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CMF C23 H27 N5 O3 S

$$\begin{array}{c} \text{Et}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{O} \\ \\ \text{C} \\ \text{O} \\ \\ \text{N} \\ \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 845887-85-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(1-methyl-4-piperidinyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c} S \\ NH - C - NH_2 \\ C = O \\ NH \\ Me \end{array}$$

RN 845887-86-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-N-[(3S)-hexahydro-1-methyl-1H-azepin-3-yl]-5-(4-methoxyphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

# Absolute stereochemistry.

RN 845887-88-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3-[2-(diethylamino)ethoxy]phenyl]-N-[3-(hydroxymethyl)phenyl]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 845887-87-8 CMF C25 H30 N4 O4 S

$$\begin{array}{c} \text{Et}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{O} \\ \\ \text{C} \\ \text{O} \\ \\ \text{NH} \\ \\ \text{HO-CH}_2 \\ \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 845887-90-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(diethylamino)ethoxy]phenyl]-N-3-pyrrolidinyl-, mono(trifluoroacetate)

(9CI) (CA INDEX NAME)

CM 1

CRN 845887-89-0 CMF C22 H31 N5 O3 S

$$\begin{array}{c|c}
 & O & O - CH_2 - CH_2 - NEt_2 \\
 & O & S \\
 & H_2N - C - NH
\end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

CN

RN 845887-92-5 HCAPLUS

3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(diethylamino)ethoxy]phenyl]-N-3-pyridinyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 845887-91-4 CMF C23 H27 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 845887-93-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-[(3S)-1-methyl-3-piperidinyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## ● HCl

RN 845887-95-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3-[2-(diethylamino)ethoxy]phenyl]-N-3-pyrrolidinyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 845887-94-7 CMF C22 H31 N5 O3 S

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 845887-96-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N[(3R)-3-piperidinylmethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845887-97-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(3S)-3-pyrrolidinyl- (9CI) (CA INDEX NAME)

RN 845887-98-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(3R)-3-pyrrolidinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845887-99-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-N-[2-(dimethylamino)ethyl]-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ & & \\ \text{Me}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{NH}-\text{C} \\ & & \\ & & \\ & & \\ \end{array}$$

RN 845888-00-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-N-[2-(diethylamino)ethyl]-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \circ \\ & H_2N-C-NH \\ & S \\ \hline \\ \text{Et}_2N-CH_2-CH_2-NH-C \\ & 0 \\ \end{array}$$

RN 845888-01-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-N-[(3S)-hexahydro-1H-azepin-3-yl]-5-(4-methoxyphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845888-02-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(3R)-3-piperidinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845888-03-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(4-

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piperidinylmethyl) - (9CI) (CA INDEX NAME)

RN 845888-04-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-3-pyrrolidinyl- (9CI) (CA INDEX NAME)

RN 845888-05-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-N-(1-ethyl-3-piperidinyl)-5-(4-methoxyphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 845888-06-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-N-[(3S)-1-ethylhexahydro-1H-azepin-3-yl]-5-(4-methoxyphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845888-07-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(3-hydroxyphenyl)-N-4-piperidinyl- (9CI) (CA INDEX NAME)

RN 845888-08-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-hydroxyphenyl)-N-4-piperidinyl- (9CI) (CA INDEX NAME)

RN 845888-09-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(3-methoxyphenyl)-N-4-piperidinyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{S} \\ \text{NH-C-NH}_2 \\ \text{C} \\ \text{O} \\ \text{NH} \\ \text{H} \end{array}$$

RN 845888-10-0 HCAPLUS

CN 1-Pyrrolidinecarboxylic acid, 3-[[[2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-3-thienyl]carbonyl]amino]-, 1,1-dimethylethyl ester, (3S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845888-11-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-3-piperidinyl- (9CI) (CA INDEX NAME)

RN 845888-12-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-[1-(phenylmethyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} & \text{O} \\ \parallel \\ \text{S} & \text{NH-C-NH}_2 \\ \\ \text{C} & \text{O} \\ \\ \text{NH} \\ \\ \text{Ph-CH}_2 \\ \end{array}$$

RN 845888-13-3 HCAPLUS

CN 1-Piperidinecarboxylic acid, 3-[[[2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-3-thienyl]carbonyl]amino]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 845888-14-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(1-piperidinyl)ethoxy]phenyl]-N-[2-(4-pyridinyl)ethyl]- (9CI) (CA INDEX NAME)

RN 845888-15-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-hydroxyphenyl)-N-[1-(phenylmethyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 845888-16-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-N-3-azetidinyl-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 845888-17-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-[(2S)-2-pyrrolidinylmethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845888-18-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-4-pyridinyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{S} \\ \text{NH} \\ \text{C} \\ \text{NH} \\ \end{array}$$

RN 845888-19-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-[2-(1-piperazinyl)ethyl]- (9CI) (CA INDEX NAME)

RN 845888-20-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-[2-(1-piperidinyl)ethyl]- (9CI) (CA INDEX NAME)

RN 845888-21-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-N-1-azabicyclo[2.2.2]oct-3-yl-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 845888-22-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-N-(2-hydroxyethyl)-5-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ \text{HO-CH}_2\text{-CH}_2\text{-NH-C} \\ & & & \\ & & & \\ & & & \\ \end{array}$$

RN 845888-23-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-N-(trans-4-hydroxycyclohexyl)-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

MeO 
$$\sim$$
 NH2  $\sim$  NH  $\sim$  NH  $\sim$  OH

) SECTION ST

RN 845888-24-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-hydroxyphenyl)-N-[2-(4-pyridinyl)ethyl]- (9CI) (CA INDEX NAME)

HO S NH 
$$-C-NH_2$$
 C  $-CH_2$  C  $-CH_2$ 

RN 845888-25-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-N-[1-[(3,5-dimethoxyphenyl)methyl]-4-piperidinyl]-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 845888-26-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-[2-(4-pyridinyl)ethyl]- (9CI) (CA INDEX NAME)

RN 845888-27-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-hydroxyphenyl)-N-[2-(3-pyridinyl)ethyl]- (9CI) (CA INDEX NAME)

RN 845888-28-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-[2-(3-pyridinyl)ethyl]- (9CI) (CA INDEX NAME)

RN 845888-29-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(2,2,6,6-tetramethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)

MeO 
$$C = O$$
  $NH - C - NH_2$   $C = O$   $NH$   $Me$   $Me$   $Me$   $Me$ 

RN 845888-30-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(2-methoxyphenyl)-N-4-piperidinyl- (9CI) (CA INDEX NAME)

RN 845888-31-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-[(tetrahydro-2-furanyl)methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & O \\ \hline O & CH_2 - NH - C \\ \hline O & S \\ \hline H_2N - C - NH \\ \end{array}$$

RN 845888-32-6 HCAPLUS

CN 1-Piperidinecarboxylic acid, 3-[[[2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-3-thienyl]carbonyl]amino]-, 1,1-dimethylethyl ester, (3R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845888-33-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(3-pyridinylmethyl)- (9CI) (CA INDEX NAME)

RN 845888-34-8 HCAPLUS

CN 1-Azetidinecarboxylic acid, 3-[[[2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-3-thienyl]carbonyl]amino]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 845888-35-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(4-pyridinylmethyl)- (9CI) (CA INDEX NAME)

RN 845888-36-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(3-methoxypropyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \circ & \circ \\ & | & & \circ \\ & | & & \circ \\ & | & & \circ \\ & | & & \circ \\ & | & & \circ \\ & | & &$$

RN 845888-37-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-[2-(2-thienyl)ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} S & \text{OMe} \\ \hline \\ CH_2-CH_2-NH-C \\ \hline \\ H_2N-C-NH \\ \end{array}$$

RN 845888-38-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(2-thienylmethyl)- (9CI) (CA INDEX NAME)

RN 845888-40-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-N-(2-methoxyethyl)-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ \text{H}_2\text{N}-\text{C}-\text{NH} & & \\ & & \\ \text{MeO}-\text{CH}_2-\text{CH}_2-\text{NH}-\text{C} \\ & & \\ & & \\ \text{O} \end{array}$$

RN 845888-41-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-hydroxyphenyl)-N-(2-thienylmethyl)- (9CI) (CA INDEX NAME)

RN 845888-42-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-N-[2-[(2-furanylmethyl)thio]ethyl]-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & CH_2-S-CH_2-CH_2-NH-C \\ \hline & O & S \\ \hline & H_2N-C-NH \end{array}$$

RN 845888-43-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-hydroxyphenyl)-N-[2-(2-thienyl)ethyl]- (9CI) (CA INDEX NAME)

RN 845888-46-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(1,2,3,4-tetrahydro-3-quinolinyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} H & O & O \\ \hline NH - C & S \\ \hline H_2N - C - NH & \\ \end{array}$$

RN 845888-47-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-N-(1,3-benzodioxol-5-ylmethyl)-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 845888-48-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-[(3-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

RN 845888-49-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-N-[2-(3,4-dimethoxyphenyl)ethyl]-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 845888-50-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-[(5-methyl-2-furanyl)methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \text{O} & \text{O} \\ \text{CH}_2 - \text{NH} - \text{C} & \text{O} \\ \text{O} & \text{S} \\ \text{H}_2 \text{N} - \text{C} - \text{NH} \end{array}$$

RN 845888-51-9 HCAPLUS

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CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(2-pyridinylmethyl)- (9CI) (CA INDEX NAME)

RN 845888-52-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-N-[(4-fluorophenyl)methyl]-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 845888-53-1 HCAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[2-[(aminocarbonyl)amino]-5-(3-methoxyphenyl)-3-thienyl]carbonyl]amino]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

MeO 
$$\begin{array}{c} S \\ NH-C-NH_2 \\ \hline \\ C-OBu-t \\ \hline \\ O \\ \end{array}$$

RN 845888-55-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-[(2-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

RN 845888-56-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(2-phenoxyethyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O \\ H_2N-C-NH \\ \end{array} \begin{array}{c} S \\ \end{array}$$
 Pho-  $CH_2-CH_2-NH-C \\ 0 \\ \end{array}$ 

RN 845888-57-5 HCAPLUS

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CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-[2-(2-pyridinyl)ethyl]- (9CI) (CA INDEX NAME)

RN 845888-58-6 HCAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-3-thienyl]carbonyl]amino]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 845888-59-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-[(4-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

RN 845888-61-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(diethylamino)ethoxy]phenyl]-N-(3S)-3-piperidinyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 845888-60-0 CMF C23 H33 N5 O3 S

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 845888-63-3 HCAPLUS

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CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(diethylamino)ethoxy]phenyl]-N-(3R)-3-piperidinyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 845888-62-2 CMF C23 H33 N5 O3 S

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 845888-65-5 HCAPLUS

CN 1-Piperidinecarboxylic acid, 3-[[[2-[(aminocarbonyl)amino]-5-[4-[2-(diethylamino)ethoxy]phenyl]-3-thienyl]carbonyl]amino]-, 1,1-dimethylethylester, (3S)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 845888-64-4 CMF C28 H41 N5 O5 S

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

CN

RN 845888-66-6 HCAPLUS

3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(diethylamino)ethoxy]phenyl]-N-[(3S)-hexahydro-1H-azepin-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

# Absolute stereochemistry.

RN 845888-68-8 HCAPLUS

CN 1-Piperidinecarboxylic acid, 3-[[[2-[(aminocarbonyl)amino]-5-[4-[2-(diethylamino)ethoxy]phenyl]-3-thienyl]carbonyl]amino]-, 1,1-dimethylethylester, (3R)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM . 1

CRN 845888-67-7 CMF C28 H41 N5 O5 S

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 845888-70-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[[[(2,5-dimethoxyphenyl)amino]carbonyl]amino]-5-(4-methoxyphenyl)-N-3-piperidinyl- (9CI) (CA INDEX NAME)

RN 845888-71-3 HCAPLUS

CN 3-Thiophenecarboxamide, 5-[4-[2-(diethylamino)ethoxy]phenyl]-2[[(pyrazinylamino)carbonyl]amino]-N-(3S)-3-pyrrolidinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845888-72-4 HCAPLUS

CN 3-Thiophenecarboxamide, 5-[3-[2-(diethylamino)ethoxy]phenyl]-2[[(pyrazinylamino)carbonyl]amino]-N-(3S)-3-pyrrolidinyl-,
monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

#### ● HCl

RN 845888-73-5 HCAPLUS

CN 3-Thiophenecarboxamide, 5-[3-[2-(diethylamino)ethoxy]phenyl]-N-4-piperidinyl-2-[[(pyrazinylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Et}_2\text{N-CH}_2\text{-CH}_2\text{-CH}_2\text{-O} \\ \\ \text{C} \\ \text{O} \\ \\ \text{NH} \\ \\ \text{H} \end{array}$$

RN 845888-74-6 HCAPLUS

CN 3-Thiophenecarboxamide, N-[(3S)-hexahydro-1H-azepin-3-yl]-5-(4-methoxyphenyl)-2-[[(pyrazinylamino)carbonyl]amino]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## HCl

RN 845888-75-7 HCAPLUS

CN 3-Thiophenecarboxamide, 5-[3-[2-(diethylamino)ethoxy]phenyl]-N-3-piperidinyl-2-[[(pyrazinylamino)carbonyl]amino]-, monohydrochloride (9CI) (CA INDEX NAME)

## ● HCl

RN 845888-76-8 HCAPLUS

CN 3-Thiophenecarboxamide, N-(2-aminoethyl)-5-(4-methoxyphenyl)-2-[[(pyrazinylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} S & O \\ NH-C-NH-N \\ N & N \\ \hline \\ C-NH-CH_2-CH_2-NH_2 \\ \hline \\ O \end{array}$$

RN 845888-77-9 HCAPLUS

CN 3-Thiophenecarboxamide, 5-[4-[2-(diethylamino)ethoxy]phenyl]-N-3-piperidinyl-2-[[(pyrazinylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 845888-78-0 HCAPLUS

CN 3-Thiophenecarboxamide, 5-(4-methoxyphenyl)-N-4-piperidinyl-2-[[(pyrazinylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 845888-80-4 HCAPLUS

CN 1-Piperidinecarboxylic acid, 3-[[[5-[3-[2-(diethylamino)ethoxy]phenyl]-2-[[(pyrazinylamino)carbonyl]amino]-3-thienyl]carbonyl]amino]-,
1,1-dimethylethyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 845888-79-1

## CMF C32 H43 N7 O5 S

$$\begin{array}{c} \text{Et}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{O} \\ \\ \text{C} \\ \text{O} \\ \\ \text{NH} \\ \\ \text{C} \\ \text{NH} \\ \\ \text{C} \\ \text{N} \\ \\ \text{N} \\ \\ \text{O} \\ \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 845888-81-5 HCAPLUS

CN 3-Thiophenecarboxamide, 5-[4-[2-(diethylamino)ethoxy]phenyl]-N-4-piperidinyl-2-[[(pyrazinylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 845888-82-6 HCAPLUS

CN 3-Thiophenecarboxamide, 5-(4-methoxyphenyl)-2[[(pyrazinylamino)carbonyl]amino]-N-(3S)-3-pyrrolidinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845888-85-9 HCAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[5-(4-methoxyphenyl)-2-[[(pyrazinylamino)carbonyl]amino]-3-thienyl]carbonyl]amino]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 845888-86-0 HCAPLUS

CN 1-Piperidinecarboxylic acid, 3-[[[5-[4-[2-(diethylamino)ethoxy]phenyl]-2-[[(pyrazinylamino)carbonyl]amino]-3-thienyl]carbonyl]amino]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \mathtt{Et_2N-CH_2-CH_2-O} & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

RN 845888-87-1 HCAPLUS

CN 3-Thiophenecarboxamide, 5-[4-[2-(diethylamino)ethoxy]phenyl]-2-[[(hydroxyamino)carbonyl]amino]-N-(3S)-3-piperidinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845888-88-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-N-[(3S)-hexahydro-1H-azepin-3-yl]-5-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845888-89-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(2-hydroxyphenyl)-N-(3S)-3-piperidinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845888-90-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(3-methoxyphenyl)-N-(3S)-3-piperidinyl-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845888-91-7 HCAPLUS

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CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3-(phenylmethoxy)phenyl]-N-(3S)-3-piperidinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845888-92-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-(3S)-3-piperidinyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 845888-93-9 HCAPLUS

CN 3-Thiophenecarboxamide, 5-[4-[2-(diethylamino)ethoxy]phenyl]-2-[[(hydroxyamino)carbonyl]amino]-N-(3S)-3-piperidinyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

#### ● HCl

IT 845887-63-0 845887-65-2 845887-67-4 845887-70-9 845887-76-5 845887-78-7 845887-83-4 845887-87-8 845887-89-0 845887-91-4 845887-94-7 845888-60-0 845888-62-2 845888-67-7 845888-79-1 845888-94-0 845888-95-1 845888-96-2 845888-97-3 845888-98-4 845888-99-5 845889-01-2 845889-02-3 845889-03-4 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of thiophene compds. as CHK1 inhibitors for treatment of cancer, infection) RN845887-63-0 HCAPLUS CN1-Piperidinecarboxylic acid, 3-[[[2-[(aminocarbonyl)amino]-5-[4-[2-(diethylamino) ethoxy]phenyl] -3-thienyl]carbonyl]amino] -, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 845887-65-2 HCAPLUS
CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(diethylamino)ethoxy]phenyl]-N-3-piperidinyl- (9CI) (CA INDEX NAME)

RN 845887-67-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3-[2-(diethylamino)ethoxy]phenyl]-N-3-piperidinyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Et}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{O} \\ \\ \text{C} \\ \\ \text{NH} \\ \\ \text{HN} \end{array}$$

RN 845887-70-9 HCAPLUS

CN 1-Piperidinecarboxylic acid, 3-[[[2-[(aminocarbonyl)amino]-5-[3-[2-(diethylamino)ethoxy]phenyl]-3-thienyl]carbonyl]amino]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Et}_2\text{N-CH}_2\text{-CH}_2\text{-O} \\ \text{C-O} \\ \text{NH-C-NH}_2 \\ \text{C-NH}_2 \\ \text{C$$

RN 845887-76-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(diethylamino)ethoxy]phenyl]-N-[3-(hydroxymethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 845887-78-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3-[2-(diethylamino)ethoxy]phenyl]-N-4-piperidinyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Et}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{O} \\ \\ \text{C} \\ \text{O} \\ \\ \text{NH} \\ \\ \text{H} \end{array}$$

RN 845887-83-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3-[2-(diethylamino)ethoxy]phenyl]-N-3-pyridinyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Et}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{O} \\ \\ \text{C} \\ \\ \text{O} \\ \\ \text{NH} \end{array}$$

RN 845887-87-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3-[2-(diethylamino)ethoxy]phenyl]-N-[3-(hydroxymethyl)phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Et}_2\text{N-CH}_2\text{-CH}_2\text{-O} \\ \text{C-O} \\ \text{NH-C-NH}_2 \\ \text{HO-CH}_2 \end{array}$$

RN 845887-89-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(diethylamino)ethoxy]phenyl]-N-3-pyrrolidinyl- (9CI) (CA INDEX NAME)

RN 845887-91-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(diethylamino)ethoxy]phenyl]-N-3-pyridinyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Et}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{O} \\ \\ \text{S} \\ \text{NH}-\text{C}-\text{NH}_2 \\ \\ \text{C} \\ \text{O} \\ \\ \text{NH} \\ \\ \text{N} \\ \end{array}$$

RN. 845887-94-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3-[2-(diethylamino)ethoxy]phenyl]-N-3-pyrrolidinyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

RN 845888-60-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(diethylamino)ethoxy]phenyl]-N-(3S)-3-piperidinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845888-62-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(diethylamino)ethoxy]phenyl]-N-(3R)-3-piperidinyl- (9CI) (CA INDEX NAME)

RN 845888-67-7 HCAPLUS

CN 1-Piperidinecarboxylic acid, 3-[[[2-[(aminocarbonyl)amino]-5-[4-[2-(diethylamino)ethoxy]phenyl]-3-thienyl]carbonyl]amino]-, 1,1-dimethylethyl ester, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845888-79-1 HCAPLUS

CN 1-Piperidinecarboxylic acid, 3-[[[5-[3-[2-(diethylamino)ethoxy]phenyl]-2-[[(pyrazinylamino)carbonyl]amino]-3-thienyl]carbonyl]amino]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Et}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{O} \\ \text{C} \\ \text{O} \\ \text{NH} \\ \text{C} \\ \text{N} \\ \text{N} \\ \text{C} \\ \text{O} \\ \text{O} \\ \end{array}$$

RN 845888-94-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-N-[(3S)-hexahydro-1-

methyl-1H-azepin-3-yl]-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845888-95-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-N-[(3S)-1-methyl-3-piperidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845888-96-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-N-[(3S)-hexahydro-1H-azepin-3-yl]-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 845888-97-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-N-(1-ethyl-3-piperidinyl)-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 845888-98-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-N-[(3S)-1-ethylhexahydro-1H-azepin-3-yl]-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 845888-99-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(diethylamino)ethoxy]phenyl]-N-[(3S)-hexahydro-1H-azepin-3-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845889-01-2 HCAPLUS

CN 3-Thiophenecarboxamide, 5-[3-[2-(diethylamino)ethoxy]phenyl]-2[[(pyrazinylamino)carbonyl]amino]-N-(3S)-3-pyrrolidinyl- (9CI) (CA INDEX NAME)

RN 845889-02-3 HCAPLUS

CN 3-Thiophenecarboxamide, N-[(3S)-hexahydro-1H-azepin-3-yl]-5-(4-methoxyphenyl)-2-[[(pyrazinylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845889-03-4 HCAPLUS

CN 3-Thiophenecarboxamide, 5-[3-[2-(diethylamino)ethoxy]phenyl]-N-3-piperidinyl-2-[[(pyrazinylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)

IT 845889-06-7P 845889-07-8P 845889-15-8P

845889-16-9P 845889-18-1P 845889-23-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of thiophene compds. as CHK1 inhibitors for treatment of cancer, infection)

RN 845889-06-7 HCAPLUS

CN 1-Piperidinecarboxylic acid, 3-[[[2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-3-thienyl]carbonyl]amino]-, 1,1-dimethylethyl ester, (3S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845889-07-8 HCAPLUS

CN 1H-Azepine-1-carboxylic acid, 3-[[[2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-3-thienyl]carbonyl]amino]hexahydro-, 1,1-dimethylethyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845889-15-8 HCAPLUS

CN 1H-Azepine-1-carboxylic acid, hexahydro-3-[[[5-(4-methoxyphenyl)-2-[(pyrazinylamino)carbonyl]amino]-3-thienyl]carbonyl]amino]-, 1,1-dimethylethyl ester, (3S)- (9CI) (CA INDEX NAME)

RN 845889-16-9 HCAPLUS

CN 1-Piperidinecarboxylic acid, 3-[[[5-[4-[2-(diethylamino)ethoxy]phenyl]-2-[[(hydroxyamino)carbonyl]amino]-3-thienyl]carbonyl]amino]-, 1,1-dimethylethyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 845889-18-1 HCAPLUS

CN 1H-Azepine-1-carboxylic acid, 3-[[[2-[(aminocarbonyl)amino]-5-(3-methoxyphenyl)-3-thienyl]carbonyl]amino]hexahydro-, 1,1-dimethylethyl ester, (3S)- (9CI) (CA INDEX NAME)

RN 845889-23-8 HCAPLUS

CN 1-Piperidinecarboxylic acid, 3-[[[2-[(aminocarbonyl)amino]-5-(3-methoxyphenyl)-3-thienyl]carbonyl]amino]-, 1,1-dimethylethyl ester, (3S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2006 ACS on STN

3

ACCESSION NUMBER: 2004:606461 HCAPLUS

DOCUMENT NUMBER: 141:157026

TITLE: Preparation of thiophenylcarboxamides as IKK-2

inhibitors for the treatment of inflammatory diseases.

INVENTOR(S): Morley, Andrew David; Poyser, Jeffrey Philip

PATENT ASSIGNEE(S): Astrazeneca Ab, Swed.; Astrazeneca UK Limited

SOURCE: PCT Int. Appl., 46 pp.

1

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

15:1412/14/2006Page 82

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WO 2004-GB106
     WO 2004063185
                                 20040729
                           Α1
                                                                      20040113
                                 20040923
     WO 2004063185
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             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ
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                                             EP 2004-701632
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             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
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     CN 1738812
                           Α
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                                                                      20040113
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                                             US 2005-542044
                                                                      20050713
     NO 2005003810
                                 20051012
                                             NO 2005-3810
                                                                      20050812
PRIORITY APPLN. INFO.:
                                             SE 2003-91
                                                                      20030115
                                             WO 2004-GB106
                                                                     20040113
OTHER SOURCE(S):
                          MARPAT 141:157026
GI
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AB Title compds. I [R1 = H, CH3; R2 = H, halo, CN, etc.; X = C(R4R5)yNR3(CR4R5)m-Ar; y = n + 1; n = 1-3; m = 0-3; R3 = H, (un)substitued alkenyl, alkyl; R4, R5 = H, alkyl with provisos; Ar = Ph ring or a 5- or 6- membered heterocyclic ring containing one to three heteroatoms, e.g., O, N, S; ] and their pharmaceutically acceptable salts were prepared For example, Pd mediated coupling of 2-[(aminocarbonyl)amino]-5-bromothiophene-3-carboxamide and bromide II, e.g., prepared from 1-bromo-2-[2-chloroethoxy]benzene and N-methylbenzylamine, afforded thiophenylcarboxamide III. In IKK-2 filter kinase inhibition assays, 6-examples of compds. I exhibited IC50 values ranging from 0.01-1.43 μM, e.g., the IC50 value of thiophenylcarboxamide III was 0.04 μM. Compds. I are claimed useful for the treatment of inflammatory diseases.
IT 727741-81-3P 727741-82-4P 727741-83-5P,

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2-[(Aminocarbonyl)amino]-5-[2-[2-(benzylamino)ethoxy]phenyl]thiophene-3-
carboxamide 727741-84-6P, 2-[(Aminocarbonyl)amino]-5-[2-[2-
(benzyl-N-methylamino)ethoxy]phenyl]thiophene-3-carboxamide
727741-85-7P, 2-[(Aminocarbonyl)amino]-5-[2-[2-(1,3-dihydro-2H-
isoindol-2-yl)ethoxy]phenyl]thiophene-3-carboxamide 727741-86-8P
 2-[(Aminocarbonyl)amino]-5-[2-[[1-(4-fluorobenzyl)pyrrolidin-3-
yl]oxy]phenyl]thiophene-3-carboxamide 727741-87-9P,
2-[(Aminocarbonyl)amino]-5-[2-(1-benzylpyrrolidin-3-yloxy)phenyl]thiophene-
3-carboxamide 727741-88-0P, 2-[(Aminocarbonyl)amino]-5-[2-[2-[(4-
fluorobenzyl) amino] ethoxy] phenyl] thiophene-3-carboxamide
727741-89-1P, 2-[(Aminocarbonyl)amino]-5-[2-[2-(pyridin-3-
ylmethylamino)ethoxy]phenyl]thiophene-3-carboxamide 727741-90-4P
, 2-[(Aminocarbonyl)amino]-5-[2-[2-(pyridin-2-
ylmethylamino)ethoxy]phenyl]thiophene-3-carboxamide 727741-91-5P
, 2-[(Aminocarbonyl)amino]-5-[2-[2-(pyridin-4-
ylmethylamino) ethoxy] phenyl] thiophene-3-carboxamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (preparation of thiophenylcarboxamides as IKK-2 inhibitors for the treatment
   of inflammatory diseases.)
727741-81-3 HCAPLUS
3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-[[(2-
chlorophenyl) methyl] methylamino]ethoxy]phenyl] - (9CI) (CA INDEX NAME)
```

RN CN

RN 727741-82-4 HCAPLUS
CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-[[(4-chlorophenyl)methyl]methylamino]ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & & \\ & & \\ & \text{CH}_2 - \text{N} - \text{CH}_2 - \text{CH}_2 - \text{O} \\ & & \\$$

RN 727741-83-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-[(phenylmethyl)amino]ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 727741-84-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-[methyl(phenylmethyl)amino]ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 727741-85-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(1,3-dihydro-2H-isoindol-2-yl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$H_2N$$
 $H_2N$ 
 $NH_2$ 

RN 727741-86-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[1-[(4-fluorophenyl)methyl]-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 727741-87-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[1-(phenylmethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & O \\
 & \parallel \\
 & C-NH_2
\end{array}$$

$$\begin{array}{c|c}
 & NH-C-NH_2\\
 & \parallel \\
 & O \\$$

RN 727741-88-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-[[(4-fluorophenyl)methyl]amino]ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 727741-89-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(methyl-3-pyridinylamino)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 727741-90-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(methyl-2-pyridinylamino)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
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 & \text{N-CH}_2 - \text{CH}_2 - \text{O} \\
 & \text{O} \\
 & \text{H}_2 \text{N-C-NH} & \text{S} \\
 & \text{H}_2 \text{N-C} & \text{H}_2 - \text{O} \\
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 & \text{O}$$

RN 727741-91-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(methyl-4-pyridinylamino)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O & O - CH_2 - CH_2 - N \\
H_2N - C - NH & S & Me
\end{array}$$

TT 727741-95-9P, tert-Butyl N-[2-[2-[3-(aminocarbonyl)-2[(aminocarbonyl)amino]thien-5-yl]phenoxy]ethyl]-N-benzylcarbamate
727742-03-2P, tert-Butyl N-[2-[2-[3-(aminocarbonyl)-2[(aminocarbonyl)amino]thien-5-yl]phenoxy]ethyl]-N-(4fluorobenzyl)carbamate 727742-06-5P, tert-Butyl-N-[2-[2-[3-(aminocarbonyl)-2-[(aminocarbonyl)amino]thien-5-yl]phenoxy]ethyl]-Npyridin-3-ylmethylcarbamate 727742-09-8P, tert-Butyl
N-[2-[2-[3-(aminocarbonyl)-2-[(aminocarbonyl)amino]thien-5-

## 10568380.trn

RN 727742-03-2 HCAPLUS
CN Carbamic acid, [2-[2-[4-(aminocarbonyl)-5-[(aminocarbonyl)amino]-2-thienyl]phenoxy]ethyl][(4-fluorophenyl)methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 727742-06-5 HCAPLUS
CN Carbamic acid, [2-[2-[4-(aminocarbonyl)-5-[(aminocarbonyl)amino]-2-thienyl]phenoxy]ethyl] (3-pyridinylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 727742-09-8 HCAPLUS

CN Carbamic acid, [2-[2-[4-(aminocarbonyl)-5-[(aminocarbonyl)amino]-2-thienyl]phenoxy]ethyl](2-pyridinylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 727742-12-3 HCAPLUS

CN Carbamic acid, [2-[2-[4-(aminocarbonyl)-5-[(aminocarbonyl)amino]-2-thienyl]phenoxy]ethyl](4-pyridinylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L8 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:282559 HCAPLUS

DOCUMENT NUMBER: 138:304153

TITLE: Preparation of 2-ureidothiophenes as angiogenesis and

Chkl kinase inhibitors for treating various forms of

cancer and hyperproliferative disorders

INVENTOR(S): Parrish, Cynthia A.; Callahan, James F.; Li, Yue;

Stavenger, Robert A.; Holt, Dennis A. Smithkline Beecham Corporation, USA

PATENT ASSIGNEE(S): Smithkline Beecham Corporat SOURCE: PCT Int. Appl., 47 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.						D	DATE		APPLICATION NO.						DATE			
	WO	WO 2003029241								WO 2002-US31752									
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	
			LS,	LT,	LU,	LV,	MA,	MD.,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PH,	PL,	
			PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	.TM,	TR,	TT,	TZ,	UA,	UG,	
			US,	UΖ,	VN,	YU,	ZA,	zw											
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,	
			KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	
			FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	SK,	TR,	BF,	ВJ,	CF,	
•			CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG				
PRIC	. :					US 2001-326977P						P 20011004							
OTHE		MARPAT 138:304153																	

GT

Ureidothiophenes (shown as I; variables defined below; e.g. 5-(4-fluorophenyl)-2-(3-methylureido)thiophene-3-carboxylic acid amide) useful in the inhibition of angiogenesis and damage response kinases (no data) are provided. Although the methods of preparation are not claimed, 46 example prepns. are included. For I: R1 = H, C1-2 alkyl, XH, XCH3, C1-2-alkyl-XH, C1-2 alkyl-XCH3, C(0)NH2, C(0)NHCH3, and C(0)-C1-2-alkyl; X = O, S, and NH; R2 = C(0)R5, C02R5, C(0)NHC(0)NR5, C(0)NHC(:NH)R5, C(0)NHC(:NH)NR5R6, C(0)NHC(0)R5, C(0)NHC(0)NF5R6, S02R5, S(0)R5, S03R5, and PO3R5R6. R3 is H or halogen; R4 is aryl or heteroaryl; addnl. details are given in the claims.

IT 354812-11-6P, 5-(4-Methoxyphenyl)-2-ureidothiophene-3-carboxylic
 acid amide 507475-35-6P, 5-(4-Methoxyphenyl)-2-(3 methylureido)thiophene-3-carboxylic acid amide 507475-44-7P,
 5-(3-Hydroxyphenyl)-2-(3-methylureido)thiophene-3-carboxylic acid amide
 507475-51-6P, 5-(4-Methoxyphenyl)-2-(3-methylureido)thiophene-3 carboxylic acid methylamide 507475-53-8P, 5-(4-Hydroxy-3 methoxyphenyl)-2-(3-methylureido)thiophene-3-carboxylic acid methylamide

## 10568380.trn

507475-55-0P, 5-(3,4-Dimethoxyphenyl)-2-(3-methylureido)thiophene-3-carboxylic acid methylamide 507475-59-4P, 5-(3-Methoxyphenyl)-2-ureidothiophene-3-carboxylic acid amide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of 2-ureidothiophenes as angiogenesis and Chkl kinase inhibitors for treating various forms of cancer and hyperproliferative disorders)

RN 354812-11-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-(9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ \parallel \\ H_2N-C-NH \\ \end{array} \begin{array}{c} S \\ \parallel \\ O \end{array} \begin{array}{c} OMe \\ \end{array}$$

RN 507475-35-6 HCAPLUS

CN 3-Thiophenecarboxamide, 5-(4-methoxyphenyl)-2[[(methylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 507475-44-7 HCAPLUS

CN 3-Thiophenecarboxamide, 5-(3-hydroxyphenyl)-2[[(methylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)

MeNH-C-NH S OH
$$H_2N-C$$

$$0$$

$$0$$

RN 507475-51-6 HCAPLUS

CN 3-Thiophenecarboxamide, 5-(4-methoxyphenyl)-N-methyl-2-[[(methylamino)carbonyl]amino]-(9CI) (CA INDEX NAME)

RN 507475-53-8 HCAPLUS

CN 3-Thiophenecarboxamide, 5-(4-hydroxy-3-methoxyphenyl)-N-methyl-2-[[(methylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 507475-55-0 HCAPLUS

CN 3-Thiophenecarboxamide, 5-(3,4-dimethoxyphenyl)-N-methyl-2-[[(methylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 507475-59-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(3-methoxyphenyl)-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O \\ H_2N-C-NH \\ & \\ & \\ & \\ O \end{array}$$

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2003:97411 HCAPLUS

DOCUMENT NUMBER:

138:137162

TITLE:

Preparation of ureido-carboxamido thiophenes as,

inhibitors of IKK2 kinase

INVENTOR(S):

Faull, Alan; Johnstone, Craig; Morley, Andrew; Poyser,

Jeffrey Philip

PATENT ASSIGNEE(S):

SOURCE:

Astrazeneca A.B., Swed.

PCT Int. Appl., 180 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	PATENT NO.		_		KIND		DATE		APPLICATION NO.					DATE				
WO	WO 2003010158																	
	W:										, BG,							
											, EE,							
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											, SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	
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	RW:										, TZ,							
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						BF,	ВJ,	CF,	CG,	CI	, CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	
		.NE,																
CA	CA 2454703						AA 20030206				2002-	24541	20020719					
EP	EP 1421074				A1 20040526				EP	2002-	7519:	20020719						
	R:										, IT,					MC,	PT,	
		ΙE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	AL	, TR,	BG,	CZ,	EE,	SK			
	A 20041026					BR	2002-	1147	20020719									
CN									20020719									
									20020719									
NZ					NZ	2002-	5307	20020719										
	2004				A1		2004	1202		US	2004-	4845	69		2	0040	122	
	7125				B2		2006											
ZA	2004	00049	92		Α		2005	0422		ZA	2004-	492			2	0040	122	
					Α		2004	0325		NO	2004-	313			2	0040	123	
PRIORITY APPLN. INFO.:										SE	2001-	2616		Ī	A 2	0010	725	
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OTHER S	MARI	PAT	138:	13716	52													

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AB Title compds. I [R1 = NH2, (un) substituted methyl; X = O, S; R2 = H, halo, CN, NO2, amino, carboxamido, carboxy, etc.; A = Ph, 5-7-membered (un) substituted heteroarom. ring; n = 1-2; R3 = W-Y-Z; W = O, SOO-2; amino, CH2(O), bond; Y = (CH2)0-2-T-(CH2)0-2; T = O, CO, alkyl; Z = Ph, 5-6-membered (un) substituted heteroarom. ring, etc.; with specific exceptions] are prepared For instance, (1,1'-biphenyl-4-yl) acetone, cyanoacetamide, sulfur and morpholine in EtOH at 55° are reacted to give 2-Amino-4-methyl-5-(1,1'-biphenyl-4-yl)-3-thiophencarboxamide. This intermediate is treated with trichloroacetyl isocyanate and ammonia in MeOH to give example compound II. Compds. of the invention have IC50 < 10 μM for IKK2 kinase. I are useful for the treatment of inflammatory diseases.

IT 494773-75-0P, 2-[(Aminocarbonyl)amino]-5-[2-[(1-tert-butyloxycarbonyl-3-pyrrolidinyl)oxy]phenyl]-3-thiophenecarboxamide
 494773-78-3P, 2-[(Aminocarbonyl)amino]-5-[2-[(1-methylpiperidin-2-yl)methoxy]phenyl]-3-thiophenecarboxamide
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of ureido-carboxamido thiophenes as inhibitors of IKK2 kinase) 494773-75-0 HCAPLUS

RN 494773-75-0 HCAPLUS
CN 1-Pyrrolidinecarboxylic acid, 3-[2-[4-(aminocarbonyl)-5[(aminocarbonyl)amino]-2-thienyl]phenoxy]-, 1,1-dimethylethyl ester (9CI)
(CA INDEX NAME)

RN 494773-78-3 HCAPLUS
CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[(1-methyl-2-

piperidinyl)methoxy]phenyl] - (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} \\ & \text{N} \\ & \text{CH}_2 - \text{O} \\ & \text{H}_2 \text{N} - \text{C} - \text{NH} \\ & \text{S} \\ & \text{H}_2 \text{N} - \text{C} \\ & \text{O} \\ \end{array}$$

IT 494771-44-7P, 2-[(Aminocarbonyl)amino]-4-methyl-5-[4-[(3,5dimethylisoxazol-4-yl)methoxy[phenyl]-3-thiophenecarboxamide 494771-46-9P, 2-[(Aminocarbonyl)amino]-4-methyl-5-[4-((4chlorophenyl) methoxy) phenyl] -3-thiophenecarboxamide 494771-47-0P , 2-[(Aminocarbonyl)amino]-4-methyl-5-[4-[(5-chlorothien-2yl)methoxy]phenyl]-3-thiophenecarboxamide 494771-49-2P, 2-[(Aminocarbonyl)amino]-4-methyl-5-[4-[2-(2,2,6,6-tetramethylpiperidin-1yl)ethoxy]phenyl]-3-thiophenecarboxamide 494771-52-7P, 2-[(Aminocarbonyl)amino]-4-methyl-5-[4-[(thiazol-4-yl)methoxy]phenyl]-3thiophenecarboxamide 494771-55-0P, 2-[(Aminocarbonyl)amino]-4methyl-5-[4-[(1,2,5-thiadiazol-3-yl)methoxy]phenyl]-3-thiophenecarboxamide 494771-58-3P 494772-20-2P, 2-[(Aminocarbonyl)amino]-5-[4-(cyclopropylmethoxy)phenyl]-3-thiophenecarboxamide 494772-21-3P, 2-[(Aminocarbonyl)amino]-5-[3-(1,3-thiazol-4-ylmethoxy)phenyl]thiophene-3carboxamide 494772-41-7P, 2-[(Aminocarbonyl)amino]-5-(2benzyloxyphenyl)-3-thiophenecarboxamide 494772-42-8P, 2-[(Aminocarbonyl)amino]-5-[2-(4-fluorophenylmethoxy)phenyl]-3thiophenecarboxamide 494772-44-0P, 2-[(Aminocarbonyl)amino]-5-[2-[2-(4-fluorophenyl)ethoxy]phenyl]-3-thiophenecarboxamide 494772-46-2P, 2-[(Aminocarbonyl)amino]-5-[2-[2-(4chlorophenyl)ethoxy]phenyl]-3-thiophenecarboxamide 494772-48-4P, 2-[(Aminocarbonyl)amino]-5-[2-(2-phenylethoxy)phenyl]-3thiophenecarboxamide 494772-63-3P, 2-[(Aminocarbonyl)amino]-5-[4-[2-(2-methoxyethoxy)ethoxy]phenyl]-3-thiophenecarboxamide 494772-64-4P, 2-[(Aminocarbonyl)amino]-5-[4-[2-((cyclopropy1)methoxy)ethoxy]phenyl]-3-thiophenecarboxamide 494772-68-8P, 2-[(Aminocarbonyl)amino]-5-[3-chloro-4-(tetrahydrofuran-2-ylmethoxy)phenyl]-3-thiophenecarboxamide 494772-70-2P, 2-[(Aminocarbonyl)amino]-5-[4-(tetrahydrofuran-2ylmethoxy)phenyl]-3-thiophenecarboxamide 494772-74-6P, 2-[(Aminocarbonyl)amino]-5-[4-[2-(2-methoxyethoxy)ethoxy]-3-methylphenyl]-3-thiophenecarboxamide 494772-76-8P, 2-[(Aminocarbonyl)amino]-5-[3-chloro-4-[2-(2-methoxyethoxy)ethoxy]phenyl]-3-thiophenecarboxamide 494772-82-6P, 2-[(Aminocarbonyl)amino]-5-[2-[2-(4,4difluoropiperidin-1-yl)ethoxy]phenyl]-3-thiophenecarboxamide 494772-84-8P, 2-[(Aminocarbonyl)amino]-5-[2-[2-(3,3difluoropyrrolidin-1-yl)ethoxy]phenyl]-3-thiophenecarboxamide 494772-97-3P, 2-[(Aminocarbonyl)amino]-5-[3-(morpholin-4-ylmethyl)-4-isobutoxyphenyl]thiophene-3-carboxamide 494773-41-0P, 2-[(Aminocarbonyl)amino]-5-[4-(cyclopentyloxy)-2-[2-(piperidin-1-, yl)ethoxy]phenyl]thiophene-3-carboxamide 494773-46-5p, 2-[(Aminocarbonyl)amino]-5-[2-[2-(piperidin-1-yl)ethoxy]-4-(pyrrolidin-1-

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yl)phenyl]thiophene-3-carboxamide 494773-50-1P,
2-[(Aminocarbonyl)amino]-5-[4-(piperidin-1-yl)-2-[2-(piperidin-1-
yl)ethoxy]phenyl]thiophene-3-carboxamide 494773-52-3P,
2-[(Aminocarbonyl)amino]-5-[4-(morpholin-4-ylmethyl)-2-[2-(piperidin-1-
yl)ethoxy]phenyl]thiophene-3-carboxamide 494773-55-6P,
2-[(Aminocarbonyl)amino]-5-[4-(2-methoxyethoxy)-2-(2-(piperidin-1-
yl)ethoxy)phenyl]thiophene-3-carboxamide 494773-57-8P
494773-59-0P, 2-[(Aminocarbonyl)amino]-5-[2-(2-
hydroxyethoxy) phenyl] thiophene-3-carboxamide 494773-61-4P,
(R) -2-[(Aminocarbonyl)amino]-5-[2-((tetrahydrofuran-3-yl)oxy)phenyl]-3-
thiophenecarboxamide 494773-62-5P 494773-64-7P,
2-[(Aminocarbonyl)amino]-5-[2-((tetrahydropyran-4-yl)oxy)phenyl]-3-
thiophenecarboxamide 494773-66-9P, 2-[(Aminocarbonyl)amino]-5-[2-
(cyclopropylmethoxy) phenyl] -3-thiophenecarboxamide 494773-68-1P,
2-[(Aminocarbonyl)amino]-5-[2-(cyclopentyloxy)phenyl]-3-
thiophenecarboxamide 494773-70-5P, 2-[(Aminocarbonyl)amino]-5-[2-
[(1-isopropylpyrrolidin-3-yl)oxy]phenyl]-3-thiophenecarboxamide
494773-73-8P, 2-[(Aminocarbonyl)amino]-5-[2-((1-ethylpyrrolidin-3-
yl)oxy)phenyl]-3-thiophenecarboxamide 494773-77-2P,
2-[(Aminocarbonyl)amino]-5-[2-((pyrrolidin-3-yl)oxy)phenyl]-3-
thiophenecarboxamide 494773-80-7P, (S)-2-[(Aminocarbonyl)amino]-
5-[2-[(1-methylpyrrolidin-2-yl)methoxy]phenyl]-3-thiophenecarboxamide
494773-82-9P, 2-[(Aminocarbonyl)amino]-5-[2-[[1-(2-
methoxyethyl)pyrrolidin-3-yl]oxy]phenyl]-3-thiophenecarboxamide
494773-84-1P, (R)-2-[(Aminocarbonyl)amino]-5-[2-((1-
methylpyrrolidin-2-yl)methoxy)phenyl]-3-thiophenecarboxamide
494773-87-4P, 2-[(Aminocarbonyl)amino]-5-[2-[2-(2,2,6-
trimethylpiperidin-1-yl)ethoxy]phenyl]-3-thiophenecarboxamide
494773-90-9P, 2-[(Aminocarbonyl)amino]-5-[5-chloro-2-((1-
isopropylpyrrolidin-3-yl)oxy)phenyl]-3-thiophenecarboxamide
494773-92-1P, 2-[(Aminocarbonyl)amino]-5-[4-fluoro-2-[(1-
isopropylpyrrolidin-3-yl)oxy]phenyl]-3-thiophenecarboxamide
494773-94-3P, 2-[(Aminocarbonyl)amino]-5-[4,5-difluoro-2-[(1-
isopropylpyrrolidin-3-yl)oxy]phenyl]-3-thiophenecarboxamide
494773-96-5P, 2-[(Aminocarbonyl)amino]-5-[2-[(1-
isopropylpyrrolidin-3-yl)oxy]-5-methylphenyl]-3-thiophenecarboxamide
494773-98-7P 494774-00-4P, 2-[(Aminocarbonyl)amino]-5-[2-
[(1-isopropylpyrrolidin-3-yl)oxy]-5-methoxyphenyl]-3-thiophenecarboxamide
494774-02-6P, 2-[(Aminocarbonyl)amino]-5-[3,5-difluoro-2-[(1-
isopropylpyrrolidin-3-yl)oxy]phenyl]-3-thiophenecarboxamide
494774-04-8P, 2-[(Aminocarbonyl)amino]-5-[2-[(1-
isopropylpyrrolidin-3-yl)oxy]-3-methoxyphenyl]-3-thiophenecarboxamide
494774-06-0P, 2-[(Aminocarbonyl)amino]-5-[2-[(1-
isopropylpyrrolidin-3-yl)oxy]-5-trifluoromethylphenyl]-3-
thiophenecarboxamide 494774-08-2P, 2-[(Aminocarbony1)amino]-5-[2-
((1-isopropylpyrrolidin-3-yl)oxy)-4-(trifluoromethyl)phenyl]-3-
thiophenecarboxamide 494774-10-6P, 2-[(Aminocarbonyl)amino]-5-[2-
[(1-isopropylpyrrolidin-3-yl)oxy]-4-methoxyphenyl]-3-thiophenecarboxamide
494774-12-8P, 2-[(Aminocarbonyl)amino]-5-[5-fluoro-2-((1-
isopropylpyrrolidin-3-yl)oxy)phenyl]-3-thiophenecarboxamide
494774-14-0P, 2-[(Aminocarbonyl)amino]-5-[2-((1-
isopropylpyrrolidin-3-yl)oxy)-3-((morpholin-4-yl)methyl)phenyl]-3-
thiophenecarboxamide 494774-16-2P, 2-[(Aminocarbonyl)amino]-5-[2-
[[1-(cyclopropylmethyl)pyrrolidin-3-yl]oxy]phenyl]-3-thiophenecarboxamide
494774-18-4P, 2-[(Aminocarbonyl)amino]-5-[2-((1-
cyclopropylpyrrolidin-3-yl)oxy)phenyl]-3-thiophenecarboxamide
494774-21-9P, 2-[(Aminocarbonyl)amino]-5-[2-[2-(4-fluoropiperidin-
1-yl)ethoxy]phenyl]-3-thiophenecarboxamide 494774-23-1P,
2-[(Aminocarbonyl)amino]-5-[2-((1-methylpiperidin-4-yl)oxy)phenyl]-3-
thiophenecarboxamide 494774-25-3P, 2-[(Aminocarbonyl)amino]-5-[2-
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RN

CN

RN 494771-46-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[(4-chlorophenyl)methoxy]phenyl]-4-methyl- (9CI) (CA INDEX NAME)

isoxazolyl)methoxy]phenyl]-4-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & & \\ H_2N-C-NH & S & & \\ H_2N-C & & Me \\ \hline \end{array}$$

RN 494771-47-0 HCAPLUS
CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[(5-chloro-2-thienyl)methoxy]phenyl]-4-methyl- (9CI) (CA INDEX NAME)

RN · 494771-49-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-4-methyl-5-[4-[2-(2,2,6,6-tetramethyl-1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494771-52-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-4-methyl-5-[4-(4-thiazolylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 494771-55-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-4-methyl-5-[4-(1,2,5-thiadiazol-3-ylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \text{II} \\ \text{NH-C-NH}_2 \\ \text{Me} \\ \begin{array}{c} \text{C-NH}_2 \\ \text{O} \\ \end{array}$$

RN 494771-58-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[(hexahydro-1-methyl-1H-azepin-3-yl)oxy]phenyl]-4-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & O & O \\
 & \parallel \\
 &$$

RN 494772-20-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(cyclopropylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 494772-21-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3-(4-thiazolylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 494772-41-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 494772-42-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[(4-fluorophenyl)methoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} F & & & \\ O & & & \\ H_2N-C-NH & S & \\ H_2N-C & & & \\ & & & \\ & & & \\ \end{array}$$

RN 494772-44-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(4-fluorophenyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} F & & & \\ \hline & CH_2-CH_2-O \\ O & & \\ H_2N-C-NH & S \\ \hline & H_2N-C \\ & & \\ O & & \\ \end{array}$$

RN 494772-46-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(4-chlorophenyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

C1
$$CH_2-CH_2-O$$

$$H_2N-C-NH$$

$$H_2N-C$$

$$O$$

$$O$$

$$O$$

$$O$$

$$O$$

$$O$$

RN 494772-48-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-(2-phenylethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 494772-63-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(2-methoxyethoxy)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \text{H}_2\text{N-C-NH} \\ \text{H}_2\text{N-C} \\ \text{O} \end{array}$$

RN 494772-64-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(cyclopropylmethoxy)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O \\ H_2N-C-NH \\ H_2N-C \\ \hline \\ O \end{array}$$

RN 494772-68-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3-chloro-4-[(tetrahydro-2-furanyl)methoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} C1 \\ S \\ NH-C-NH_2 \\ C-NH_2 \\ 0 \end{array}$$

RN 494772-70-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[(tetrahydro-2-furanyl)methoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & O \\
 & | \\
 & | \\
 & NH-C-NH_2 \\
 & | \\
 & C-NH_2 \\
 & | \\
 & O
\end{array}$$

RN 494772-74-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(2-methoxyethoxy)ethoxy]-3-methylphenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{O} \\ \text{H}_2\text{N}-\text{C}-\text{NH} \\ \text{H}_2\text{N}-\text{C} \\ \text{O} \\ \end{array}$$

RN 494772-76-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3-chloro-4-[2-(2-methoxyethoxy)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494772-82-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(4,4-difluoro-1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
F \\
N - CH_2 - CH_2 - O \\
O \\
H_2N - C - NH \\
H_2N - C \\
O \\
O
\end{array}$$

RN 494772-84-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(3,3-difluoro-1-pyrrolidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494772-97-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(2-methylpropoxy)-3-(4-morpholinylmethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 494773-41-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(cyclopentyloxy)-2-[2-(1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494773-46-5 HCAPLUS

CN

3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(1-piperidinyl)ethoxy]-4-(1-pyrrolidinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 494773-50-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(1-piperidinyl)-2-[2-

(1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494773-52-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(4-morpholinylmethyl)-2-[2-(1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & & & & & & \\ H_2N-C-NH & S & & & & & \\ H_2N-C & & & & & \\ O & & & CH_2 & & \\ & & & CH_2 & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

RN 494773-55-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(2-methoxyethoxy)-2-[2-(1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494773-57-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(4-morpholinyl)-2-[2-(1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494773-59-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-(2-hydroxyethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 494773-61-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[(3R)-tetrahydro-3-furanyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494773-62-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[(3S)-tetrahydro-3-furanyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 494773-64-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[(tetrahydro-2H-pyran-4-yl)oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494773-66-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-(cyclopropylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & \\ & & \\ H_2N-C-NH & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ \end{array}$$

RN 494773-68-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-(cyclopentyloxy)phenyl]- (9CI) (CA INDEX NAME)

RN 494773-70-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494773-73-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[(1-ethyl-3-pyrrolidinyl)oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494773-77-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-(3-pyrrolidinyloxy)phenyl]- (9CI) (CA INDEX NAME)

RN 494773-80-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[(2S)-1-methyl-2-pyrrolidinyl]methoxy]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 494773-82-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[1-(2-methoxyethyl)-

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## 10568380.trn

3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \circ & \\ & \parallel & \\ & C-NH_2 \\ & NH-C-NH_2 \\ & \parallel & \\ & O \\ & & CH_2-CH_2-OMe \\ \end{array}$$

大 神经中国中国

RN 494773-84-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[(2R)-1-methyl-2-pyrrolidinyl]methoxy]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 494773-87-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(2,2,6-trimethyl-1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494773-90-9 HCAPLUS

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CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[5-chloro-2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\$$

RN 494773-92-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-fluoro-2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494773-94-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4,5-difluoro-2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494773-96-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[5-methyl-2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ \text{Me} & & & \\ & & & \\ & & & \\ & & & \\$$

RN 494773-98-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[5-cyano-2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

RN 494774-00-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[5-methoxy-2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\$$

RN 494774-02-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3,5-difluoro-2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494774-04-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3-methoxy-2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O \\ \parallel \\ C-NH_2 \\ \hline \\ NH-C-NH_2 \\ \parallel \\ O\\ O\\ O\\ I-Pr \end{array}$$

RN 494774-06-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]-5-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 494774-08-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]-4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

$$rac{0}{C-NH_2}$$
 $rac{0}{C-NH_2}$ 
 $rac{0}{NH-C-NH_2}$ 
 $rac{1-Pr}{0}$ 

RN 494774-10-6 HCAPLUS

15:1412/14/2006Page 114

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-methoxy-2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494774-12-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[5-fluoro-2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494774-14-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]-3-(4-morpholinylmethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 494774-16-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[1-(cyclopropylmethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494774-18-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[(1-cyclopropyl-3-pyrrolidinyl)oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494774-21-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(4-fluoro-1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

F
$$N \longrightarrow CH_2 - CH_2 - O$$
 $0$ 
 $H_2N - C \longrightarrow NH$ 
 $H_2N - C$ 
 $H_2N - C$ 
 $H_2N - C$ 

RN 494774-23-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[(1-methyl-4-piperidinyl)oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494774-25-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[(1-methyl-3-pyrrolidinyl)oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494774-28-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(4-hydroxy-1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

HO 
$$N$$
—  $CH_2$ —  $CH_2$ —  $O$ 
 $H_2N$ —  $C$ —  $N$ 
 $H_2N$ —  $C$ 
 $H_2N$ —  $C$ 

RN 494774-30-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(2,2,6,6-tetramethyl-1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494774-32-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(2,5-dihydro-1H-pyrrol-1-yl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494774-34-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(2,5-dihydro-2,5-dimethyl-1H-pyrrol-1-yl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & Me \\ \hline & O-CH_2-CH_2-N \\ & & Me \\ \hline \\ & & Me \\ & & Me \\ \end{array}$$

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2006 ACS on STN

3

ACCESSION NUMBER:

2001:597977 HCAPLUS

DOCUMENT NUMBER:

135:180698

TITLE:

Preparation of thiophenecarboxamides as inhibitors of

the enzyme IKK-2

INVENTOR(S):

Baxter, Andrew; Brough, Stephen; Faull, Alan;

Johnstone, Craig; Mcinally, Thomas

PATENT ASSIGNEE(S):

SOURCE:

Astrazeneca AB, Swed. PCT Int. Appl., 85 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

_	PATENT NO.					KIND DATE				APPLICATION NO.						DATE			
									WO 2001-SE248										
			CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	CN, HR, LT,	
			SD,		SG,			MK, SL,											
		RW:	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,		CY, BF,	
	CA	2396		CF,	CG,	AA		GA, 2001									0010	207	
		1261 1261				A1 B1		2002: 2004:			EP 2	001-	9029	51		2	0010	207	
			AT,			DE,	DK,	ES, RO,	FR,	GB,			LI,	LU,	NL,	SE,	MC,	PT,	
	BR 2001008143								BR 2001-8143						20010207				
•	JP	2003	5227	66		T2		2003			JP 2						0010		
	AT 266019			E 20040515				AT 2001-902951						20010207					
	NZ	51994	47			Α		2004	0528		NZ 2	001-	5199	47		2	0010	207	
	PT	1261	600			${f T}$		2004	0831		PT 2	001-	9029	51		2	0010	207	
	ES	22183	376			Т3		2004	1116		ES 2	001-	1902	951		2.	0010	207	
	ΑU	AU 781047			B2	B2 20050505			AU 2001-30705						20010207				
	US 2002107252				<b>A1</b>	20020808			•	US 2002-868884						20020205			
	ZA 2002005300				Α	A 20031002				ZA.2002-5300						20020702			
	NO 2002003786				Α	A 20020923				NO 2002-3786						20020809			

### 10568380.trn

PRIORITY APPLN. INFO.:

GB 2000-3154

A 20000212

OTHER SOURCE(S):

WO 2001-SE248

W 20010207

MARPAT 135:180698

GI

$$R^2$$
 $A$ 
 $X$ 
 $R^1$ 
 $CONH_2$ 
 $I$ 

$$^{\text{H}}_{\text{N}}$$
  $^{\text{NH}_2}$   $^{\text{O}}_{\text{Ph}}$   $^{\text{CONH}_2}$   $^{\text{II}}$ 

AΒ The title compds. [I; A = 5-membered heteroarom. ring containing 1-2 heteroatoms selected from O, N or S; R1 = (un)substituted Ph, 5-7 membered heteroarom. ring containing 1-3 heteroatoms selected from O, N or S; R2 = H, halo, CN, etc.; X = O, S], useful in the treatment or prophylaxis of inflammatory disease, were prepared Thus, refluxing 3-amino-5-phenyl-2thiophenecarboxamide with trimethylsilyl isocyanate in DMF/CH2Cl2 afforded II.

IT 354811-31-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of thiophenecarboxamides as inhibitors of the enzyme IKK-2) RN354811-31-7 HCAPLUS

3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-4-CN methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ \parallel \\ H_2N-C-NH \\ H_2N-C \\ \parallel \\ O \end{array} \qquad \begin{array}{c} OMe \\ \\ Me \\ \end{array}$$

354811-34-0P 354811-35-1P 354811-38-4P

354811-39-5P 354811-40-8P 354811-42-0P

354811-50-0P 354811-51-1P 354811-52-2P

354811-66-8P 354811-79-3P 354811-80-6P

354811-81-7P 354811-82-8P 354811-83-9P

354811-84-0P

IT

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of thiophenecarboxamides as inhibitors of the enzyme IKK-2)

RN354811-34-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(3-methoxyphenyl)-4methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O \\ \parallel \\ H_2N-C-NH \\ \hline \\ H_2N-C \\ \hline \\ O \\ \end{array} \qquad \begin{array}{c} Me \\ \end{array}$$

RN 354811-35-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(3-chloro-4-methoxyphenyl)-4-methyl- (9CI) (CA INDEX NAME)

RN 354811-38-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxy-3-methylphenyl)-4-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & \text{Me} \\ H_2N-C-NH & S \\ H_2N-C & \text{Me} \\ \hline \\ O & \end{array}$$

RN 354811-39-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(3,5-dimethoxyphenyl)-4-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & O \\ H_2N-C-NH & S \\ \hline \\ H_2N-C & Me \\ \hline \\ O & \\ \end{array}$$

RN 354811-40-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(2,3-dimethoxyphenyl)-4-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O \\ \parallel \\ H_2N-C-NH \\ \end{array} \begin{array}{c} S \\ OMe \\ \end{array} \\ OMe \\ O$$

RN 354811-42-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-4-methyl-5-(3,4,5-trimethoxyphenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & OMe \\ H_2N-C-NH & S \\ \hline \\ H_2N-C & Me \\ \hline \\ O & \end{array}$$
 OMe

RN 354811-50-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-hydroxyphenyl)-4-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & OH \\ H_2N-C-NH & S \\ H_2N-C & Me \\ O & \end{array}$$

RN 354811-51-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-4-methyl-5-[4-[2-(1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O \\
H_2N-C-NH \\
H_2N-C \\
O
\end{array}$$
Me

RN 354811-52-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(diethylamino)ethoxy]phenyl]-4-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & O - CH_2 - CH_2 - NEt_2 \\ H_2N - C - NH & S \\ H_2N - C & Me \\ & O \end{array}$$

RN 354811-66-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-hydroxyphenyl)-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & OH \\ H_2N-C-NH & S \\ H_2N-C & \\ O & \\ \end{array}$$

RN 354811-79-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O \\ H_2N-C-NH \\ H_2N-C \\ O \end{array}$$

RN 354811-80-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(2,2,6,6-tetramethyl-1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 354811-81-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(4-thiazolylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 354811-82-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(dimethylamino)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & O - CH_2 - CH_2 - NMe_2 \\ H_2N - C - NH & S \\ H_2N - C & || \\ O & O \end{array}$$

RN 354811-83-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(diethylamino)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O \\
H_2N-C-NH
\end{array}$$

$$\begin{array}{c|c}
O-CH_2-CH_2-NEt_2\\
\end{array}$$

RN 354811-84-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(4-morpholinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O \\
H_2N-C-NH
\end{array}$$

$$\begin{array}{c|c}
O \\
CH_2-CH_2-N
\end{array}$$

IT 354812-11-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of thiophenecarboxamides as inhibitors of the enzyme IKK-2)

RN 354812-11-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-(9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ \parallel \\ H_2N-C-NH \\ \downarrow \\ O \end{array} \begin{array}{c} O \\ S \\ \downarrow \\ O \end{array}$$

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

## => d l10 ibib abs hitstr tot

L10 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2004:606462 HCAPLUS

DOCUMENT NUMBER:

141:157027

TITLE:

Preparation of thiophenylcarboxamides as IKK-2

inhibitors for the treatment of inflammatory diseases.

INVENTOR(S):

Faull, Alan Wellington; Johnstone, Craig; Morley,

Andrew David; Poyser, Jeffrey Philip

PATENT ASSIGNEE(S):

Astrazeneca Ab, Swed.; Astrazeneca UK Limited

SOURCE:

PCT Int. Appl., 59 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	TENT	NO.			KIN	D	DATE			APPL	ICAT:	ION 1	NO.	•	D.	ATE		
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WO	WO 2004063186				A1 20040729			WO 2004-GB96					20040113					
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
								IL,										
								MA,								·		
EP					A1 20051012				EP 2004-701627					20040113				
	R:	ΑT,	ΒE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
								MK,									•	
	JP 2006516273				T2 20060629				JP 2006-500200				20040113					
US	2006	0585	22		A1		2006	0316	1	US 2	005-	5423	26		2	0050	713 •	<
PRIORITY APPLN. INFO.:									SE 2	003-9	92		7	A 2	0030	115		
									1	WO 2	004-0	3B96		7	v 2	0040	113	
OTHER S	OTHER SOURCE(S):				MAR	PAT	141:	1570	27									

GI

$$NH-CO-NH_2$$
 $CO-NH_2$ 
 $R^2$ 
 $R^1$ 
 $R^1$ 
 $R^2$ 
 $R^1$ 
 $R^2$ 
 $R^2$ 
 $R^3$ 
 $R^4$ 
 $R^4$ 

AB Title compds. I [R1 = H, CH3; R2 = H, halo, CN, etc.; R3, R4 = H, CH3; A = H6-membered aromatic ring optionally incorporating one or two nitrogen atoms; X = NR6; R5 = H, C1, alky1, etc.; R6 = H, C1, alky1] and their pharmaceutically acceptable salts were prepared For example, Pd mediated coupling of 2-[(aminocarbonyl)amino]-5-bromothiophene-3-carboxamide and bromide II, e.g., prepared from 4-bromobenzylbromide and 2,2,2-trifluoroethylamine, afforded thiophenylcarboxamide III. filter kinase inhibition assays, 4-examples of compds. I exhibited IC50 values ranging from 0.00056-0.066 µM, e.g., the IC50 value of thiophenylcarboxamide III was 0.0036 µM. Compds. I are claimed useful for the treatment of inflammatory diseases. IT 728947-61-3P 728947-62-4P 728947-63-5P 728947-64-6P 728947-65-7P 728947-66-8P 728947-67-9P 728947-68-0P 728947-69-1P 728947-70-4P 728947-71-5P 728947-72-6P 728947-73-7P 728947-74-8P 728947-75-9P 728947-76-0P 728947-77-1P 728947-78-2P 728947-79-3P 728947-80-6P 728947-81-7P 728947-82-8P 728947-83-9P 728947-84-0P 728947-85-1P 728947-86-2P 728947-87-3P 728947-88-4P 728947-89-5P 728947-90-8P 728947-91-9P 728947-93-1P 728947-94-2P 728947-95-3P 728947-97-5P 728947-98-6P 728948-18-3P 728948-19-4P 728948-20-7P 728948-21-8P 728948-22-9P 728948-23-0P 728948-24-1P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (preparation of thiophenylcarboxamides as IKK-2 inhibitors for the treatment of inflammatory diseases.)

3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[(2,2,2-trifluoroethyl)amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

728947-61-3 HCAPLUS

RN

CN

$$\begin{array}{c|c}
CH_2-NH-CH_2-CF_3\\
H_2N-C-NH-CH_2-CF_3\\
H_$$

RN 728947-62-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[(1-methylethyl)amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & CH_2-NHPr-i\\ H_2N-C-NH & S\\ H_2N-C\\ & 0 \end{array}$$

RN 728947-63-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[bis(2-methoxyethyl)amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$CH_2 - CH_2 - OMe$$
 $CH_2 - CH_2 - OMe$ 
 $CH_2 - CH_2 - OMe$ 
 $CH_2 - CH_2 - OMe$ 
 $CH_2 - CH_2 - OMe$ 

RN 728947-64-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[ethyl(2-methoxyethyl)amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Et} \\ \mid \\ \text{CH}_2\text{N-CH}_2\text{-CH}_2\text{-CH}_2\text{-OMe} \\ \mid \\ \text{H}_2\text{N-C} \\ \mid \\ \text{O} \end{array}$$

RN 728947-65-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[(dimethylamino)methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ \parallel \\ H_2N-C-NH \\ \end{array} \begin{array}{c} S \\ \parallel \\ O \end{array}$$

RN 728947-66-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[(2-methoxyethyl)(2,2,2-trifluoroethyl)amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{CH}_2\text{-}\text{CF}_3\\ \text{CH}_2\text{-}\text{CH}_2\text{-}\text{CH}_2\text{-}\text{OMe} \\ \text{H}_2\text{N}\text{-}\text{C}\text{-}\text{NH} \\ \text{O} \end{array}$$

RN 728947-67-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[(2-methoxyethyl)amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{C} \\ \text{H}_2\text{N}-\text{C}-\text{NH} \\ \text{H}_2\text{N}-\text{C} \\ \text{O} \end{array}$$

RN 728947-68-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[[2-(1H-indol-3-yl)ethyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 728947-69-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[(methylamino)methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & CH_2-NHMe \\ H_2N-C-NH & S \\ H_2N-C & \\ O & \\ \end{array}$$

RN 728947-70-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[(cyclopropylamino)methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O \\
H_2N-C-NH
\end{array}$$

$$\begin{array}{c|c}
CH_2-NH
\end{array}$$

$$\begin{array}{c|c}
H_2N-C \\
\parallel O
\end{array}$$

RN 728947-71-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[[(2R)-2-hydroxypropyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
  $O$   $H_2N$   $O$   $O$   $H$   $O$   $H$ 

RN 728947-72-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[[(2S)-2-hydroxypropyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
 O  $H_2N$  O  $H_2N$  OH

RN 728947-73-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[[(tetrahydro-2-furanyl)methyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & & \\ &$$

RN 728947-74-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[[(4-fluorophenyl)methyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O \\ H_2N-C-NH-CH_2 \\ \hline \\ H_2N-C \\ \hline \\ O \\ \end{array}$$

RN 728947-75-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[[3-(2-oxo-1-pyrrolidinyl)propyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

N— (CH<sub>2</sub>)<sub>3</sub>-NH-CH<sub>2</sub>

$$C-NH2$$
O
NH-C-NH<sub>2</sub>

$$C-NH2$$
O

RN 728947-76-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[(1-naphthalenylmethyl)amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 728947-77-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[[2-(4-chlorophenyl)-1-(hydroxymethyl)amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} CH_2-OH & CH_2-OH \\ H_2N-C-NH & S & CH_2-NH-CH-CH_2 \\ \hline \\ H_2N-C & || \\ O & CH_2-NH-CH-CH_2 \\ \hline \end{array}$$

RN 728947-78-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[(cyclopentylamino)methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 728947-79-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[(3-pyridinylmethyl)amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O \\ H_2N-C-NH \\ S \\ \end{array}$$

$$\begin{array}{c|c} CH_2-NH-CH_2 \\ \end{array}$$

$$\begin{array}{c|c} N \\ \\ \end{array}$$

RN 728947-80-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[[2-(2-pyridinyl)ethyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O \\ H_2N-C-NH \\ S \\ H_2N-C \\ O \\ \end{array}$$

RN 728947-81-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[(2-hydroxy-1,1-dimethylethyl)amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & \\ H_2N-C-NH-S & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

RN 728947-82-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[(1,2-diphenylethyl)amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

O 
$$CH_2-NH-CH-CH_2-Ph$$
 $H_2N-C$ 
 $H_2N-C$ 
 $H_2N-C$ 

RN 728947-83-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[(2-methoxy-1-methylethyl)amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 728947-84-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[(2-hydroxy-1-methylethyl)amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \\ \text{H}_2\text{N}-\text{C}-\text{NH} \\ \\ \text{H}_2\text{N}-\text{C} \\ \\ \text{O} \end{array}$$

RN 728947-85-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[[(2-methylphenyl)methyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \circ \\ \\ H_2N-C-NH \\ \\ H_2N-C \\ \\ 0 \\ \end{array}$$

RN 728947-86-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[[(3-methoxyphenyl)methyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O \\ H_2N-C-NH-S \\ H_2N-C \\ O \\ \end{array}$$

RN 728947-87-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[[(2-fluorophenyl)methyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O \\
H_2N-C-NH-CH_2\\
H_2N-C \\
0
\end{array}$$

RN 728947-88-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[[(3-fluorophenyl)methyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O \\
H_2N-C-NH-CH_2
\end{array}$$

$$\begin{array}{c|c}
F \\
H_2N-C \\
0
\end{array}$$

RN 728947-89-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[(4-phenylbutyl)amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ H_2N-C-NH \\ \end{array}$$

$$\begin{array}{c} CH_2-NH-(CH_2)_4-Ph \\ \\ H_2N-C \\ \\ O \\ \end{array}$$

RN 728947-90-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[[[3-(trifluoromethyl)phenyl]methyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & & & & & \\ H_2N-C-NH-S & & & & & \\ H_2N-C & & & & & \\ \end{array}$$

RN 728947-91-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[(5-cyanopentyl)amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O \\
H_2N-C-NH-CH_2-NH-CH_2) & 5-CN \\
H_2N-C \\
0
\end{array}$$

RN 728947-93-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[(2-methylpropyl)amino]methyl]phenyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 728947-92-0 CMF C17 H22 N4 O2 S

$$\begin{array}{c} O \\ || \\ H_2N-C-NH \\ || \\ O \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

CN

RN 728947-94-2 HCAPLUS

3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[[(4-methoxyphenyl)methyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O \\ H_2N-C-NH \\ \end{array} \begin{array}{c|c} CH_2-NH-CH_2 \\ \hline \\ 0 \\ \end{array} \\ OMe$$

RN 728947-95-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[(2-phenylethyl)amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$H_2N-C$$
 $H_2N-C$ 
 $H_2N-C$ 
 $H_2N-C$ 
 $H_2N-C$ 

RN 728947-97-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[(2-hydroxyethyl)amino]methyl]phenyl]-, mono(trifluoroacetate) (salt) (9CI)

(CA INDEX NAME)

CM 1

CRN 728947-96-4

CMF C15 H18 N4 O3 S

$$\begin{array}{c} O \\ \parallel \\ H_2N-C-NH \\ \end{array} \begin{array}{c} CH_2-NH-CH_2-CH_2-OH \\ \parallel \\ O \end{array}$$

CM 2

CRN 76-05-1

CMF C2 H F3 O2

$$F-C-CO_2H$$

RN 728947-98-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[(2-methoxy-2-methylpropyl)amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{OMe} \\ \text{OMe} \\ \text{H}_2\text{N}-\text{C}-\text{NH}-\text{CH}_2-\text{C}-\text{Me} \\ \text{Me} \\ \\ \text{H}_2\text{N}-\text{C} \\ \text{O} \\ \end{array}$$

RN 728948-18-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[(3-methoxypropyl)amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ H_2N-C-NH & & S \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ \end{array}$$

RN 728948-19-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[(diethylamino)methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ \parallel \\ H_2N-C-NH \\ \end{array}$$

$$\begin{array}{c} CH_2-NEt_2 \\ \parallel \\ O \\ \end{array}$$

RN 728948-20-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[(2-cyanoethyl)methylamino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ | \\ | \\ \text{CH}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CN} \\ | \\ | \\ \text{H}_2\text{N}-\text{C} \\ | \\ \text{O} \end{array}$$

RN 728948-21-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[(2-cyanoethyl)(phenylmethyl)amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} CH_2-Ph \\ CH_2-CH_2-CH_2-CN \\ CH_2-CH_2-CN \\ CH_2-CH_2-CN \\ CH_2-CH_2-CN \\ CH_2-CH_2-CN \\ CH_2-CN \\$$

RN 728948-22-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[(2-hydroxyethyl)methylamino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \\ | \\ \\ \text{CH}_2\text{N}-\text{C} \\ | \\ \\ \text{N} \\ \\ \text{CH}_2-\text{N}-\text{CH}_2-\text{CH}_2-\text{OH} \\ \\ \\ | \\ \\ \text{O} \\ \end{array}$$

RN 728948-23-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[(2-hydroxyethyl)(phenylmethyl)amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} CH_2-Ph \\ CH_2-N-CH_2-CH_2-OH \\ \\ H_2N-C \\ \\ O \end{array}$$

RN 728948-24-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[bis(2-hydroxyethyl)amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$CH_2 - CH_2 - OH$$
 $CH_2 - CH_2 - OH$ 
 $CH_2 - CH_2 - OH$ 

IT 494773-25-0P, 2-[(Aminocarbonyl)amino]-5-(4-formylphenyl)thiophene-3-carboxamide

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of thiophenylcarboxamides as IKK-2 inhibitors for the treatment of inflammatory diseases.)

RN 494773-25-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-formylphenyl)- (9CI) (CA INDEX NAME)

L10 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:606461 HCAPLUS

DOCUMENT NUMBER: 141:157026

TITLE: Preparation of thiophenylcarboxamides as IKK-2

inhibitors for the treatment of inflammatory diseases.

INVENTOR(S): Morley, Andrew David; Poyser, Jeffrey Philip PATENT ASSIGNEE(S): Astrazeneca Ab, Swed.; Astrazeneca UK Limited

SOURCE: PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE		
WO 2004063185	A1 20040729	WO 2004-GB106	20040113		
WO 2004063185	C1 20040923				
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BW, BY,	BZ, CA, CH,		
		DM, DZ, EC, EE, EG, ES,			
GE, GH, GM,	HR, HU, ID, IL,	IN, IS, JP, KE, KG, KP,	KR, KZ, LC,		
LK, LR, LS,	LT, LU, LV, MA,	MD, MG, MK, MN, MW, MX,	MZ		
AU 2004203967	A1 20040729	AU 2004-203967	20040113		
CA 2512336	AA 20040729	CA 2004-2512336	20040113		

# 10568380.trn

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EP 1583756
                                 20051012
                                              EP 2004-701632
                                                                      20040113
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
                           Α
                                 20051227
                                              BR 2004-6774
                                                                      20040113
     CN 1738812
                           Α
                                 20060222
                                              CN 2004-80002304
                                                                      20040113
     JP 2006515355
                                              JP 2006-500206
                           T2
                                 20060525
                                                                      20040113
     US 2006111431
                           A1
                                 20060525
                                              US 2005-542044
                                                                      20050713 <-
     NO 2005003810
                           Α
                                 20051012
                                              NO 2005-3810
                                                                      20050812
PRIORITY APPLN. INFO.:
                                              SE 2003-91
                                                                      20030115
                                              WO 2004-GB106
                                                                   Α
                                                                      20040113
OTHER SOURCE(S):
                          MARPAT 141:157026
GT
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AB Title compds. I [R1 = H, CH3; R2 = H, halo, CN, etc.; X = C(R4R5)yNR3(CR4R5)m-Ar; y = n + 1; n = 1-3; m = 0-3; R3 = H,(un) substitued alkenyl, alkyl; R4, R5 = H, alkyl with provisos; Ar = Ph ring or a 5- or 6- membered heterocyclic ring containing one to three heteroatoms, e.g., O, N, S; ] and their pharmaceutically acceptable salts were prepared For example, Pd mediated coupling of 2-[(aminocarbonyl)amino]-5-bromothiophene-3-carboxamide and bromide II, e.g., prepared from 1-bromo-2-[2-chloroethoxy]benzene and N-methylbenzylamine, afforded thiophenylcarboxamide III. In IKK-2 filter kinase inhibition assays, 6-examples of compds. I exhibited IC50 values ranging from 0.01-1.43  $\mu M,$  e.g., the IC50 value of thiophenylcarboxamide III was 0.04  $\mu M.$ Compds. I are claimed useful for the treatment of inflammatory diseases. IT 727741-81-3P 727741-82-4P 727741-83-5P, 2-[(Aminocarbonyl)amino]-5-[2-[2-(benzylamino)ethoxy]phenyl]thiophene-3carboxamide 727741-84-6P, 2-[(Aminocarbonyl)amino]-5-[2-[2-(benzyl-N-methylamino) ethoxy] phenyl] thiophene-3-carboxamide 727741-85-7P, 2-[(Aminocarbonyl)amino]-5-[2-[2-(1,3-dihydro-2Hisoindol-2-yl)ethoxy]phenyl]thiophene-3-carboxamide 727741-86-8P 2-[(Aminocarbonyl)amino]-5-[2-[[1-(4-fluorobenzyl)pyrrolidin-3yl]oxy]phenyl]thiophene-3-carboxamide 727741-87-9P, 2-[(Aminocarbonyl)amino]-5-[2-(1-benzylpyrrolidin-3-yloxy)phenyl]thiophene-3-carboxamide 727741-88-0P, 2-[(Aminocarbonyl)amino]-5-[2-[2-[(4-

### 10568380.trn

fluorobenzyl) amino] ethoxy] phenyl] thiophene-3-carboxamide 727741-89-1P, 2-[(Aminocarbonyl)amino]-5-[2-[2-(pyridin-3ylmethylamino)ethoxy]phenyl]thiophene-3-carboxamide 727741-90-4P , 2-[(Aminocarbonyl)amino]-5-[2-[2-(pyridin-2ylmethylamino)ethoxy]phenyl]thiophene-3-carboxamide 727741-91-5P , 2-[(Aminocarbonyl)amino]-5-[2-[2-(pyridin-4ylmethylamino) ethoxy] phenyl] thiophene-3-carboxamide RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of thiophenylcarboxamides as IKK-2 inhibitors for the treatment of inflammatory diseases.) RN 727741-81-3 HCAPLUS 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-[(2-CN chlorophenyl)methyl]methylamino]ethoxy]phenyl]- (9CI) (CA INDEX NAME)

C1 Me

$$CH_2 - N - CH_2 - CH_2 - O$$
 $H_2N - C - NH$ 
 $H_2N - C$ 
 $H_2N - C$ 

RN 727741-82-4 HCAPLUS
CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-[[(4-chlorophenyl)methyl]methylamino]ethoxylphenyl]- (9CI) (CA INDEX NAME)

Me
$$CH_{2}-N-CH_{2}-CH_{2}-O$$

$$H_{2}N-C-NH$$

$$H_{2}N-C$$

RN 727741-83-5 HCAPLUS
CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2[(phenylmethyl)amino]ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 727741-84-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-[methyl(phenylmethyl)amino]ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 727741-85-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(1,3-dihydro-2H-isoindol-2-yl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$H_2N$$
 $H_2N$ 
 $NH_2$ 

RN 727741-86-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[1-[(4-fluorophenyl)methyl]-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 727741-87-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[1-(phenylmethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 727741-88-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-[[(4-fluorophenyl)methyl]amino]ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 727741-89-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(methyl-3-pyridinylamino)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 727741-90-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(methyl-2-pyridinylamino)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & \text{Me} \\
 & \text{N} & \text{CH}_2 - \text{CH}_2 - \text{O} \\
 & \text{O} & \text{H}_2\text{N} - \text{C} - \text{NH} & \text{S} \\
 & \text{H}_2\text{N} - \text{C} & \text{H}_2 - \text{C} \\
 & \text{O} & \text{O} & \text{O} \\
 & \text{O} & \text{O} \\
 & \text{O} & \text{O} & \text{O} \\
 & \text{O} & \text{O} \\$$

RN 727741-91-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(methyl-4-pyridinylamino)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O & O - CH_2 - CH_2 - N \\
H_2N - C - NH & S & Me
\end{array}$$

IT 727741-95-9P, tert-Butyl N-[2-[2-[3-(aminocarbonyl)-2[(aminocarbonyl)amino]thien-5-yl]phenoxy]ethyl]-N-benzylcarbamate
727742-03-2P, tert-Butyl N-[2-[2-[3-(aminocarbonyl)-2[(aminocarbonyl)amino]thien-5-yl]phenoxy]ethyl]-N-(4fluorobenzyl)carbamate 727742-06-5P, tert-Butyl-N-[2-[2-[3-(aminocarbonyl)-2-[(aminocarbonyl)amino]thien-5-yl]phenoxy]ethyl]-Npyridin-3-ylmethylcarbamate 727742-09-8P, tert-Butyl
N-[2-[2-[3-(aminocarbonyl)-2-[(aminocarbonyl)amino]thien-5-

RN 727742-03-2 HCAPLUS
CN Carbamic acid, [2-[2-[4-(aminocarbonyl)-5-[(aminocarbonyl)amino]-2-thienyl]phenoxy]ethyl][(4-fluorophenyl)methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 727742-06-5 HCAPLUS
CN Carbamic acid, [2-[2-[4-(aminocarbonyl)-5-[(aminocarbonyl)amino]-2-thienyl]phenoxy]ethyl] (3-pyridinylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 727742-09-8 HCAPLUS

CN Carbamic acid, [2-[2-[4-(aminocarbonyl)-5-[(aminocarbonyl)amino]-2-thienyl]phenoxy]ethyl](2-pyridinylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 727742-12-3 HCAPLUS

CN Carbamic acid, [2-[2-[4-(aminocarbonyl)-5-[(aminocarbonyl)amino]-2-thienyl]phenoxy]ethyl](4-pyridinylmethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

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L10 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2004:515662 HCAPLUS
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DOCUMENT NUMBER: 141:47386

TITLE: Ureidothiophene compound NF-κB inhibitor for

therapeutic use

INVENTOR(S): Callahan, James Frances; Li, Yue Hu
PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA

SOURCE: PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.						KIND DATE			APPLICATION NO.							ATE			
	WO 2004053087 WO 2004053087									WO 2003-US38970										
		<b>W</b> :	ΑE,	AG,	ΑL,	AU,	BA,	BB,	BR,	ΒZ,	CA,	CN,	co,	CR,	CU,	DM,	DZ,	EC,		
												JР,								
												PH,								
				US,												•	•	•		
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,		
			BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,		
			ES,	FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,		
												GQ,							TG	
	ΑU	2003	3008	32		A1		2004	0630	AU 2003-300832						20031205				
	EP	1569	924		A2 20050907					EP 2	003-	8128	58	20031205						
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,		
												TR,								
	JP	2006	5106	76		T2		2006	0330		JP 2	004-	5594	35		20	00312	205		
	US	2006	1164	19		A1		2006	0601		US 2	005-	5376	97		20	00506	606 •	<	
PRIO	RITY	APP	LN.	INFO	. :						US 2	002-4	4314	96P		P 20	00212	206		
					•					1	WO 2	003-1	US38	970	1	W 20	00312	205		
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3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-fluorophenyl)- (9CI)

507475-17-4 HCAPLUS

(CA INDEX NAME)

RN

CN

L10 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:97411 HCAPLUS

DOCUMENT NUMBER: 138:137162

Preparation of ureido-carboxamido thiophenes as TITLE:

inhibitors of IKK2 kinase

INVENTOR(S): Faull, Alan; Johnstone, Craig; Morley, Andrew; Poyser,

Jeffrey Philip

PATENT ASSIGNEE(S): Astrazeneca A.B., Swed. PCT Int. Appl., 180 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	rent 1	10.			KIND DATE				APPLICATION NO.						DATE				
WO	WO 2003010158						A1 20030206				2002-	SE14	20020719						
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CA	24547	703	•	•	AA 20030206					CA 2	2002-	2454	20020719						
		A1 20040526																	
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BR	20020	114	73 <sup>.</sup>	•	A 20041026					BR 2	2002-	1147	20020719						
CN	15412	214			A 20041027					CN 2	2002-	8158	20020719						
JP	20055	5033	72		T2 20050203				JP 2	2003-	5155		20020719						
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US	US 2004242573						A1 20041202			US 2004-484569					20040122 <				
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PRIORITY	RIORITY APPLN. INFO.:									SE 2	2001-	2616			A 2	0010	725		
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OTHER SO	· •					PAT	138:	1371				<del>-</del>			_		· =•		

AB Title compds. I [R1 = NH2, (un)substituted methyl; X = 0, S; R2 = H, halo, CN, NO2, amino, carboxamido, carboxy, etc.; A = Ph, 5-7-membered (un)substituted heteroarom. ring; n = 1-2; R3 = W-Y-Z; W = 0, SOO-2; amino, CH2(O), bond; Y = (CH2)0-2-T-(CH2)0-2; T = 0, CO, alkyl; Z = Ph, 5-6-membered (un)substituted heteroarom. ring, etc.; with specific exceptions] are prepared For instance, (1,1'-biphenyl-4-yl)acetone, cyanoacetamide, sulfur and morpholine in EtOH at 55° are reacted to give 2-Amino-4-methyl-5-(1,1'-biphenyl-4-yl)-3-thiophencarboxamide. This intermediate is treated with trichloroacetyl isocyanate and ammonia in MeOH to give example compound II. Compds. of the invention have IC50 < 10 μM for IKK2 kinase. I are useful for the treatment of inflammatory diseases.

1T 494773-24-9P, 2-[(Aminocarbonyl)amino]-5-[4-[(4-methylpiperazin-1-yl)methyl]phenyl]thiophene-3-carboxamide 494773-33-0P,
2-[(Aminocarbonyl)amino]-5-[4-[(4-hydroxypiperidin-1-yl)methyl]phenyl]thiophene-3-carboxamide 494773-75-0P,
2-[(Aminocarbonyl)amino]-5-[2-[(1-tert-butyloxycarbonyl-3-pyrrolidinyl)oxy]phenyl]-3-thiophenecarboxamide 494773-78-3P,
2-[(Aminocarbonyl)amino]-5-[2-[(1-methylpiperidin-2-yl)methoxy]phenyl]-3-thiophenecarboxamide
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of ureido-carboxamido thiophenes as inhibitors of IKK2 kinase) 494773-24-9 HCAPLUS

3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O \\
H_2N-C-NH \\
H_2N-C \\
0
\end{array}$$

RN 494773-33-0 HCAPLUS

RN

CN

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[(4-hydroxy-1-piperidinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)

$$H_2N-C-NH$$
 S  $CH_2-N$  OH

RN 494773-75-0 HCAPLUS

CN 1-Pyrrolidinecarboxylic acid, 3-[2-[4-(aminocarbonyl)-5-[(aminocarbonyl)amino]-2-thienyl]phenoxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 494773-78-3 HCAPLUS
CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[(1-methyl-2-piperidinyl)methoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} \\ & \text{N} \\ & \text{CH}_2 - \text{O} \\ & \text{H}_2 \text{N} - \text{C} - \text{NH} \\ & \text{H}_2 \text{N} - \text{C} \\ & \text{H}_2 \\ & \text{O} \end{array}$$

IT 494771-42-5P, 2-[(Aminocarbonyl)amino]-4-methyl-5-(1,1'-biphenyl-4yl)-3-thiophenecarboxamide 494771-44-7P, 2-[(Aminocarbonyl)amino]-4-methyl-5-[4-[(3,5-dimethylisoxazol-4yl)methoxy]phenyl]-3-thiophenecarboxamide 494771-46-9P, 2-[(Aminocarbonyl)amino]-4-methyl-5-[4-((4-chlorophenyl)methoxy)phenyl]-3thiophenecarboxamide 494771-47-0P, 2-[(Aminocarbonyl)amino]-4methyl-5-[4-[(5-chlorothien-2-yl)methoxy]phenyl]-3-thiophenecarboxamide 494771-49-2P, 2-[(Aminocarbonyl)amino]-4-methyl-5-[4-[2-(2,2,6,6tetramethylpiperidin-1-yl)ethoxy]phenyl]-3-thiophenecarboxamide 494771-52-7P, 2-[(Aminocarbonyl)amino]-4-methyl-5-[4-[(thiazol-4yl)methoxy]phenyl]-3-thiophenecarboxamide 494771-55-0P, 2-[(Aminocarbonyl)amino]-4-methyl-5-[4-[(1,2,5-thiadiazol-3yl)methoxy]phenyl]-3-thiophenecarboxamide 494771-58-3P 494772-19-9P, 2-[(Aminocarbonyl)amino]-5-[4-(1,3,4-oxadiazol-2yl)phenyl]-3-thiophenecarboxamide 494772-20-2P, 2-[(Aminocarbonyl)amino]-5-[4-(cyclopropylmethoxy)phenyl]-3thiophenecarboxamide 494772-21-3P, 2-[(Aminocarbonyl)amino]-5-[3-(1,3-thiazol-4-ylmethoxy)phenyl]thiophene-3-carboxamide 494772-23-5P, 2-[(Aminocarbonyl)amino]-5-[4-(morpholin-4ylmethyl) phenyl] thiophene-3-carboxamide 494772-41-7P, 2-[(Aminocarbonyl)amino]-5-(2-benzyloxyphenyl)-3-thiophenecarboxamide

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494772-42-8P, 2-[(Aminocarbonyl)amino]-5-[2-(4-
fluorophenylmethoxy)phenyl]-3-thiophenecarboxamide 494772-44-0P,
2-[(Aminocarbonyl)amino]-5-[2-[2-(4-fluorophenyl)ethoxy]phenyl]-3-
thiophenecarboxamide 494772-46-2P, 2-[(Aminocarbonyl)amino]-5-[2-
[2-(4-chlorophenyl)ethoxy]phenyl]-3-thiophenecarboxamide
494772-48-4P, 2-[(Aminocarbonyl)amino]-5-[2-(2-
phenylethoxy) phenyl] -3-thiophenecarboxamide 494772-52-0P,
2-[(Aminocarbonyl)amino]-5-[2-[2-(morpholinyl)ethylsulfanyl]phenyl]-3-
thiophenecarboxamide 494772-54-2P 494772-56-4P,
2-[(Aminocarbonyl)amino]-5-[2-[2-(piperidinyl)ethylsulfanyl]phenyl]-3-
thiophenecarboxamide 494772-58-6P, 2-[(Aminocarbonyl)amino]-5-[4-
(pyrrolidinyl) phenyl] -3-thiophenecarboxamide 494772-59-7P,
2-[(Aminocarbonyl)amino]-5-[4-(piperidinyl)phenyl]-3-thiophenecarboxamide
494772-60-0P, 2-[(Aminocarbonyl)amino]-5-[4-(imidazolyl)phenyl]-3-
thiophenecarboxamide 494772-63-3P, 2-[(Aminocarbonyl)amino]-5-[4-
[2-(2-methoxyethoxy)ethoxy]phenyl]-3-thiophenecarboxamide
494772-64-4P, 2-[(Aminocarbonyl)amino]-5-[4-[2-
((cyclopropyl)methoxy)ethoxy]phenyl]-3-thiophenecarboxamide
494772-68-8P, 2-[(Aminocarbonyl)amino]-5-[3-chloro-4-
(tetrahydrofuran-2-ylmethoxy)phenyl]-3-thiophenecarboxamide
494772-70-2P, 2-[(Aminocarbonyl)amino]-5-[4-(tetrahydrofuran-2-
ylmethoxy) phenyl] -3-thiophenecarboxamide 494772-74-6P,
2-[(Aminocarbonyl)amino]-5-[4-[2-(2-methoxyethoxy)ethoxy]-3-methylphenyl]-3-thiophenecarboxamide 494772-76-8P, 2-[(Aminocarbonyl)amino]-5-
[3-chloro-4-[2-(2-methoxyethoxy)ethoxy]phenyl]-3-thiophenecarboxamide
494772-78-0P, 2-[(Aminocarbonyl)amino]-5-[2-(4-
methylpiperazinylmethyl)phenyl]-3-thiophenecarboxamide
494772-80-4P, 2-[(Aminocarbonyl)amino]-5-[2-(4-
isopropylpiperazinylmethyl)phenyl]-3-thiophenecarboxamide
494772-81-5P, 2-[(Aminocarbonyl)amino]-5-[4-
(pyrrolidinylmethyl)phenyl]thiophene-3-carboxamide 494772-82-6P,
2-[(Aminocarbonyl)amino]-5-[2-[2-(4,4-difluoropiperidin-1-
yl)ethoxy]phenyl]-3-thiophenecarboxamide 494772-84-8P,
2-[(Aminocarbonyl)amino]-5-[2-[2-(3,3-difluoropyrrolidin-1-
yl)ethoxy]phenyl]-3-thiophenecarboxamide 494772-93-9P,
2-[(Aminocarbonyl)amino]-5-[4-(cis-2,6-dimethylmorpholin-4-
ylmethyl)phenyl]thiophene-3-carboxamide 494772-95-1P,
2-[(Aminocarbonyl)amino]-5-[[4-(8-oxa-3-azabicyclo[3.2.1]octan-3-
yl) methyl] phenyl] thiophene-3-carboxamide 494772-97-3P,
2-[(Aminocarbonyl)amino]-5-[3-(morpholin-4-ylmethyl)-4-
isobutoxyphenyl]thiophene-3-carboxamide 494772-99-5P,
2-[(Aminocarbonyl)amino]-5-[3-(morpholin-4-ylmethyl)phenyl]thiophene-3-
carboxamide 494773-00-1P, 2-[(Aminocarbonyl)amino]-5-[4-[[2-
(\verb|methoxymethy1|) \verb|morpholin-4-y1| \verb|methy1| pheny1| thiophene-3-carboxamide
494773-02-3P, 2-[(Aminocarbonyl)amino]-5-[3-fluoro-4-(morpholin-4-
ylmethyl)phenyl]thiophene-3-carboxamide 494773-03-4P
494773-05-6P, 2-[(Aminocarbonyl)amino]-5-[4-[(4,4-
difluoropiperidin-1-yl)methyl]phenyl]thiophene-3-carboxamide
494773-07-8P, 2-[(Aminocarbonyl)amino]-5-[4-[1-(piperidin-1-
yl)ethyl]phenyl]thiophene-3-carboxamide 494773-09-0P
494773-11-4P, 2-[(Aminocarbonyl)amino]-5-[4-[[4-(2-
methoxyethyl)piperazin-1-yl]methyl]phenyl]thiophene-3-carboxamide
494773-13-6P, 2-[(Aminocarbonyl)amino]-5-[4-((piperidin-1-
yl) methyl) phenyl] thiophene-3-carboxamide 494773-14-7P,
2-[(Aminocarbonyl)amino]-5-[4-[[(1S,4S)-2-oxa-5-azabicyclo[2.2.1]heptan-5-
yl]methyl]phenyl]thiophene-3-carboxamide 494773-16-9P.
5-[4-[(4-Acetylpiperazin-1-yl)methyl]phenyl]-2-
[(aminocarbonyl)amino]thiophene-3-carboxamide 494773-18-19.
2-[(Aminocarbonyl)amino]-5-[4-(1,4-oxazepan-4-ylmethyl)phenyl]thiophene-3-
carboxamide 494773-20-5P 494773-22-7P,
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2-[(Aminocarbonyl)amino]-5-[4-[1-methyl-1-(morpholin-4-
yl)ethyl]phenyl]thiophene-3-carboxamide 494773-26-1P,
2-[(Aminocarbonyl)amino]-5-[4-[(2-ethoxycarbonylpiperidin-1-
yl)methyl]phenyl]thiophene-3-carboxamide 494773-27-2P,
2-[(Aminocarbonyl)amino]-5-[4-[(3-diethylaminocarbonylpiperidin-1-
yl)methyl]phenyl]thiophene-3-carboxamide 494773-28-3P,
2-[(Aminocarbonyl)amino]-5-[4-[(3-hydroxypyrrolidin-1-
yl)methyl]phenyl]thiophene-3-carboxamide 494773-29-4P
494773-30-7P, 2-[(Aminocarbonyl)amino]-4-methyl-5-[4-
((morpholinyl)methyl)phenyl]-3-thiophenecarboxamide 494773-34-1P
 2-[(Aminocarbonyl)amino]-5-(2-(piperazin-1-yl)phenyl)thiophene-3-
carboxamide 494773-37-4P, 2-[(Aminocarbonyl)amino]-5-[2-(4-
methylpiperazin-1-yl)phenyl]thiophene-3-carboxamide 494773-38-5P
 2-[(Aminocarbonyl)amino]-5-[2-[3-(methylamino)pyrrolidin-1-
yl]phenyl]thiophene-3-carboxamide 494773-41-0P,
2-[(Aminocarbonyl)amino]-5-[4-(cyclopentyloxy)-2-[2-(piperidin-1-
yl)ethoxy]phenyl]thiophene-3-carboxamide 494773-46-5P,
2-[(Aminocarbonyl)amino]-5-[2-[2-(piperidin-1-yl)ethoxy]-4-(pyrrolidin-1-
yl)phenyl]thiophene-3-carboxamide 494773-50-1P,
2-[(Aminocarbonyl)amino]-5-[4-(piperidin-1-yl)-2-[2-(piperidin-1-
yl)ethoxy]phenyl]thiophene-3-carboxamide 494773-52-3P,
2-[(Aminocarbonyl)amino]-5-[4-(morpholin-4-ylmethyl)-2-[2-(piperidin-1-
yl)ethoxy]phenyl]thiophene-3-carboxamide 494773-55-6P,
2-[(Aminocarbonyl)amino]-5-[4-(2-methoxyethoxy)-2-(2-(piperidin-1-
yl)ethoxy)phenyl]thiophene-3-carboxamide 494773-57-8P
494773-59-0P, 2-[(Aminocarbonyl)amino]-5-[2-(2-
hydroxyethoxy) phenyl] thiophene-3-carboxamide 494773-61-4P,
(R) -2-[(Aminocarbonyl)amino]-5-[2-((tetrahydrofuran-3-yl)oxy)phenyl]-3-
thiophenecarboxamide 494773-62-5P 494773-64-7P,
2-[(Aminocarbonyl)amino]-5-[2-((tetrahydropyran-4-yl)oxy)phenyl]-3-
thiophenecarboxamide 494773-66-9P, 2-[(Aminocarbonyl)amino]-5-[2-
(cyclopropylmethoxy)phenyl]-3-thiophenecarboxamide 494773-68-1P,
2-[(Aminocarbonyl)amino]-5-[2-(cyclopentyloxy)phenyl]-3-
thiophenecarboxamide 494773-70-5P, 2-[(Aminocarbonyl)amino]-5-[2-
[(1-isopropylpyrrolidin-3-yl)oxy]phenyl]-3-thiophenecarboxamide
494773-73-8P, 2-[(Aminocarbonyl)amino]-5-[2-((1-ethylpyrrolidin-3-
yl)oxy)phenyl]-3-thiophenecarboxamide 494773-77-2P,
2-[(Aminocarbonyl)amino]-5-[2-((pyrrolidin-3-yl)oxy)phenyl]-3-
thiophenecarboxamide 494773-80-7P, (S)-2-[(Aminocarbonyl)amino]-
5-[2-[(1-methylpyrrolidin-2-yl)methoxy]phenyl]-3-thiophenecarboxamide
494773-82-9P, 2-[(Aminocarbonyl)amino]-5-[2-[[1-(2-
methoxyethyl)pyrrolidin-3-yl]oxy]phenyl]-3-thiophenecarboxamide
494773-84-1P, (R)-2-[(Aminocarbonyl)amino]-5-[2-((1-
methylpyrrolidin-2-yl)methoxy)phenyl]-3-thiophenecarboxamide
494773-87-4P, 2-[(Aminocarbonyl)amino]-5-[2-[2-(2,2,6-
trimethylpiperidin-1-yl)ethoxy]phenyl]-3-thiophenecarboxamide
494773-90-9P, 2-[(Aminocarbonyl)amino]-5-[5-chloro-2-((1-
isopropylpyrrolidin-3-yl)oxy)phenyl]-3-thiophenecarboxamide
494773-92-1P, 2-[(Aminocarbonyl)amino]-5-[4-fluoro-2-[(1-
isopropylpyrrolidin-3-yl)oxy]phenyl]-3-thiophenecarboxamide
494773-94-3P, 2-[(Aminocarbonyl)amino]-5-[4,5-difluoro-2-[(1-
isopropylpyrrolidin-3-yl)oxy]phenyl]-3-thiophenecarboxamide
494773-96-5P, 2-[(Aminocarbonyl)amino]-5-[2-[(1-
isopropylpyrrolidin-3-yl)oxy]-5-methylphenyl]-3-thiophenecarboxamide
494773-98-7P 494774-00-4P, 2-[(Aminocarbonyl)amino]-5-[2-
[(1-isopropylpyrrolidin-3-yl)oxy]-5-methoxyphenyl]-3-thiophenecarboxamide
494774-02-6P, 2-[(Aminocarbonyl)amino]-5-[3,5-difluoro-2-[(1-
isopropylpyrrolidin-3-yl)oxy]phenyl]-3-thiophenecarboxamide
494774-04-8P, 2-[(Aminocarbonyl)amino]-5-[2-[(1-
isopropylpyrrolidin-3-yl)oxy]-3-methoxyphenyl]-3-thiophenecarboxamide
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494774-06-0P, 2-[(Aminocarbonyl)amino]-5-[2-[(1-
isopropylpyrrolidin-3-yl)oxy]-5-trifluoromethylphenyl]-3-
thiophenecarboxamide 494774-08-2P, 2-[(Aminocarbonyl)amino]-5-[2-
((1-isopropylpyrrolidin-3-yl)oxy)-4-(trifluoromethyl)phenyl]-3-
thiophenecarboxamide 494774-10-6P, 2-[(Aminocarbonyl)amino]-5-[2-
[(1-isopropylpyrrolidin-3-yl)oxy]-4-methoxyphenyl]-3-thiophenecarboxamide
494774-12-8P, 2-[(Aminocarbonyl)amino]-5-[5-fluoro-2-((1-
isopropylpyrrolidin-3-yl)oxy)phenyl]-3-thiophenecarboxamide
494774-14-0P, 2-[(Aminocarbonyl)amino]-5-[2-((1-
isopropylpyrrolidin-3-yl)oxy)-3-((morpholin-4-yl)methyl)phenyl]-3-
thiophenecarboxamide 494774-16-2P, 2-[(Aminocarbonyl)amino]-5-[2-
[[1-(cyclopropylmethyl)pyrrolidin-3-yl]oxy]phenyl]-3-thiophenecarboxamide
494774-18-4P, 2-[(Aminocarbonyl)amino]-5-[2-((1-
cyclopropylpyrrolidin-3-yl)oxy)phenyl]-3-thiophenecarboxamide
494774-21-9P, 2-[(Aminocarbonyl)amino]-5-[2-[2-(4-fluoropiperidin-
1-yl)ethoxy]phenyl]-3-thiophenecarboxamide 494774-23-1P,
2-[(Aminocarbonyl)amino]-5-[2-((1-methylpiperidin-4-yl)oxy)phenyl]-3-
thiophenecarboxamide 494774-25-3P, 2-[(Aminocarbonyl)amino]-5-[2-
((1-methylpyrrolidin-3-yl)oxy)phenyl]-3-thiophenecarboxamide
494774-27-5P, 2-[(Aminocarbonyl)amino]-5-[4-[2-(morpholin-4-
yl)acetyl]phenyl]-3-thiophenecarboxamide 494774-28-6P,
2-[(Aminocarbonyl)amino]-5-[2-[2-(4-hydroxy-1-piperidinyl)ethoxy]phenyl]-3-
thiophenecarboxamide 494774-30-0P, 2-[(Aminocarbonyl)amino]-5-[2-
[2-(2,2,6,6-tetramethylpiperidin-1-yl)ethoxy]phenyl]-3-
thiophenecarboxamide 494774-32-2P 494774-34-4P,
2-[(Aminocarbonyl)amino]-5-[2-[2-(2,5-dimethyl-3-pyrrolin-1-
yl)ethoxy]phenyl]thiophene-3-carboxamide 494774-36-6P,
(S) -2-[(Aminocarbonyl)amino]-5-[4-(2-methoxymethylpyrrolidin-1-
ylmethyl)phenyl]thiophene-3-carboxamide 494774-37-7P,
2-[(Aminocarbonyl)amino]-5-[4-((4-aminocarbonylpiperidin-1-
yl)methyl)phenyl]thiophene-3-carboxamide 494774-38-8P,
2-[(Aminocarbonyl)amino]-5-[4-((3-hydroxymethylpiperidin-1-
yl)methyl)phenyl]thiophene-3-carboxamide 494774-39-9P,
2-[(Aminocarbonyl)amino]-5-[4-(4-hydroxymethylpiperidin-1-
ylmethyl)phenyl]thiophene-3-carboxamide 494774-40-2P,
2-[(Aminocarbonyl)amino]-5-[2-[3-(morpholin-4-yl)pyrrolidin-1-
yl]phenyl]thiophene-3-carboxamide 494774-43-5P,
2-[(Aminocarbonyl)amino]-5-[2-[4-(2-methoxyethyl)piperazin-1-
yl]phenyl]thiophene-3-carboxamide 494774-45-7P,
2-[(Aminocarbonyl)amino]-5-[2-[(1S,4S)-2,5-diazabicyclo[2.2.1]heptan-2-
yl]phenyl]thiophene-3-carboxamide 494775-33-6P.
2-[(Aminocarbonyl)amino]-5-[2-((4-(tert-butyloxycarbonyl)piperazinyl)methy
1) phenyl] -3-thiophenecarboxamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
   (preparation of ureido-carboxamido thiophenes as inhibitors of IKK2 kinase)
494771-42-5 HCAPLUS
3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[1,1'-biphenyl]-4-yl-4-
methyl- (9CI) (CA INDEX NAME)
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RN

CN

$$\begin{array}{c|c} O & & Ph \\ H_2N-C-NH & S & \\ H_2N-C & Me & \\ & & \\ O & & \end{array}$$

RN 494771-44-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[(3,5-dimethyl-4-isoxazolyl)methoxy]phenyl]-4-methyl- (9CI) (CA INDEX NAME)

Me 
$$CH_2-O$$
  $Me$   $C-NH_2$   $C-NH_2$   $C-NH_2$ 

RN 494771-46-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[(4-chlorophenyl)methoxy]phenyl]-4-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & & & & \\ H_2N-C-NH & S & & & & \\ H_2N-C & & Me & & & \\ & & & & & \\ O & & & & & \\ \end{array}$$

RN 494771-47-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[(5-chloro-2-thienyl)methoxy]phenyl]-4-methyl- (9CI) (CA INDEX NAME)

$$C1 \xrightarrow{\text{CH}_2 - \text{O}} CH_2 - O \xrightarrow{\text{Me}} C-NH_2$$

RN 494771-49-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-4-methyl-5-[4-[2-(2,2,6,6-tetramethyl-1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494771-52-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-4-methyl-5-[4-(4-thiazolylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & & \\ & & & & \\ & & & \\ S & & & \\ & &$$

RN 494771-55-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-4-methyl-5-[4-(1,2,5-thiadiazol-3-ylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 494771-58-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[(hexahydro-1-methyl-1H-azepin-3-yl)oxy]phenyl]-4-methyl- (9CI) (CA INDEX NAME)

RN 494772-19-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(1,3,4-oxadiazol-2-yl)phenyl]- (9CI) (CA INDEX NAME)

RN 494772-20-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(cyclopropylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ \parallel \\ H_2N-C-NH \\ \downarrow \\ 0 \\ \end{array}$$

RN 494772-21-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3-(4-thiazolylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 494772-23-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(4-morpholinylmethyl)phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
0\\
H_2N-C-NH\\
&S\\
&CH_2-N\\
&O\\
\end{array}$$

RN 494772-41-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 494772-42-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[(4-fluorophenyl)methoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} F & & & \\ CH_2 - O & & \\ H_2N - C - NH & S & \\ H_2N - C & & \\ O & & \\ \end{array}$$

RN 494772-44-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(4-fluorophenyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494772-46-2 HCAPLUS

CN

3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(4-chlorophenyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

C1
$$CH_2-CH_2-O$$

$$H_2N-C-NH$$

$$H_2N-C$$

$$O$$

$$O$$

$$O$$

$$O$$

$$O$$

RN 494772-48-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-(2-phenylethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 494772-52-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[2-(4-morpholinyl)ethyl]thio]phenyl]- (9CI) (CA INDEX NAME)

RN 494772-54-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[2-(1-pyrrolidinyl)ethyl]thio]phenyl]- (9CI) (CA INDEX NAME)

RN 494772-56-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[2-(1-piperidinyl)ethyl]thio]phenyl]- (9CI) (CA INDEX NAME)

RN 494772-58-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(1-pyrrolidinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 494772-59-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(1-piperidinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 494772-60-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(1H-imidazol-1-yl)phenyl]- (9CI) (CA INDEX NAME)

RN 494772-63-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(2-methoxyethoxy)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ | \\ | \\ | \\ | \\ | \\ O \end{array} \\ \begin{array}{c} O - CH_2 - CH_2 - O - CH_2 - CH_2 - OMe \\ | \\ | \\ | \\ O \end{array}$$

RN 494772-64-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(cyclopropylmethoxy)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O \\
H_2N-C-NH
\end{array}$$

$$\begin{array}{c|c}
O \\
CH_2-CH_2-O-CH_2
\end{array}$$

RN 494772-68-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3-chloro-4-[(tetrahydro-2-furanyl)methoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
C1 & S & NH-C-NH_2 \\
\hline
O & CH_2-O & C-NH_2 \\
\parallel & O & C-NH_2
\end{array}$$

RN 494772-70-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[(tetrahydro-2-furanyl)methoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

RN 494772-74-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(2-methoxyethoxy)ethoxy]-3-methylphenyl]- (9CI) (CA INDEX NAME)

RN 494772-76-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3-chloro-4-[2-(2-methoxyethoxy)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494772-78-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[(4-methyl-1-piperazinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 494772-80-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[4-(1-methylethyl)-1-piperazinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 494772-81-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(1-pyrrolidinylmethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 494772-82-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(4,4-difluoro-1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} F \\ N \longrightarrow CH_2 - CH_2 - O \\ O \\ H_2N - C - NH \\ S \\ H_2N - C \\ \\ \end{array}$$

RN 494772-84-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(3,3-difluoro-1-pyrrolidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494772-93-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[(2R,6S)-2,6-dimethyl-4-morpholinyl]methyl]phenyl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

$$H_2N$$
  $O$   $N$   $R$   $Me$   $Me$   $Me$ 

RN 494772-95-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(8-oxa-3-azabicyclo[3.2.1]oct-3-ylmethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 494772-97-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(2-methylpropoxy)-3-(4-morpholinylmethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 494772-99-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3-(4-morpholinylmethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 494773-00-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[2-(methoxymethyl)-4-morpholinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O \\ H_2N-C-NH \\ & \\ & \\ & \\ O \end{array} \qquad \begin{array}{c} CH_2-OMe \\ \\ & \\ O \end{array}$$

RN 494773-02-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3-fluoro-4-(4-morpholinylmethyl)phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ H_2N-C-NH & & & \\ & & & \\ H_2N-C & & & \\ & & & \\ & & & \\ & & & \\ \end{array}$$

RN 494773-03-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3-chloro-4-(4-morpholinylmethyl)phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & & \\ & & & & & \\ H_2N-C-NH & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

RN 494773-05-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[(4,4-difluoro-1-piperidinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O \\ H_2N-C-NH \\ H_2N-C \\ 0 \\ \end{array}$$

RN 494773-07-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[1-(1-piperidinyl)ethyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & Me \\ H_2N-C-NH & S & CH-N \\ H_2N-C & H_2N-C & H_2N-C \\ & & & & \\ & & \\ & & & \\ & & \\ & & & \\ & & & \\ & &$$

RN 494773-09-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[(1R)-1-(4-morpholinyl)ethyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c} & & & & \\ H_2N & & & \\ & & & \\ H_2N & & & \\ & & & \\ & & & \\ \end{array}$$

RN 494773-11-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[4-(2-methoxyethyl)-1-piperazinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ H_2N-C-NH & & \\ & & & \\ & & & \\ H_2N-C & & \\ & & & \\$$

RN 494773-13-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(1-piperidinylmethyl)phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O \\
H_2N-C-NH \\
& \\
& \\
& \\
O
\end{array}$$

$$CH_2-N$$

RN 494773-14-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[(1S,4S)-2-oxa-5-azabicyclo[2.2.1]hept-5-ylmethyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 494773-16-9 HCAPLUS

CN 3-Thiophenecarboxamide, 5-[4-[(4-acetyl-1-piperazinyl)methyl]phenyl]-2-[(aminocarbonyl)amino]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O \\
H_2N-C-NH \\
H_2N-C \\
0
\end{array}$$

RN 494773-18-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[(tetrahydro-1,4-oxazepin-4(5H)-yl)methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 494773-20-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[(1S)-1-(4-morpholinyl)ethyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 494773-22-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[1-methyl-1-(4-morpholinyl)ethyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O & Me & O \\
H_2N-C-NH & S & Me \\
H_2N-C & Me
\end{array}$$

RN 494773-26-1 HCAPLUS

CN 2-Piperidinecarboxylic acid, 1-[[4-[4-(aminocarbonyl)-5-[(aminocarbonyl)amino]-2-thienyl]phenyl]methyl]-, ethyl ester (9CI) (CFINDEX NAME)

$$\begin{array}{c|c}
O \\
H_2N-C-NH \\
H_2N-C \\
O
\end{array}$$

$$\begin{array}{c|c}
CH_2-N \\
EtO-C \\
O
\end{array}$$

RN 494773-27-2 HCAPLUS

CN 3-Piperidinecarboxamide, 1-[[4-[4-(aminocarbonyl)-5-[(aminocarbonyl)amino]-2-thienyl]phenyl]methyl]-N,N-diethyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
0 & & & \\
H_2N-C-NH & S & & \\
H_2N-C & & & \\
0 & & & \\
\end{array}$$

RN 494773-28-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[(3-hydroxy-1-pyrrolidinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 494773-29-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[4-(2-hydroxyethyl)-1-piperazinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ H_2N-C-NH \\ H_2N-C \\ \end{array}$$

RN 494773-30-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-4-methyl-5-[4-(4-morpholinylmethyl)phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & & \\ H_2N-C-NH & S & & \\ H_2N-C & & Me \\ \hline \\ O & & \end{array}$$

RN 494773-34-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-(1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)

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RN 494773-37-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} & \\ & \text{N} \\$$

RN 494773-38-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[3-(methylamino)-1-pyrrolidinyl]phenyl]- (9CI) (CA INDEX NAME)

RN 494773-41-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(cyclopentyloxy)-2-[2-(1-piperidinyl)ethoxy]phenyl]- (9CI). (CA INDEX NAME)

RN 494773-46-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(1-piperidinyl)ethoxy]-4-(1-pyrrolidinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 494773-50-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(1-piperidinyl)-2-[2-(1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494773-52-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(4-morpholinylmethyl)-2-[2-(1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494773-55-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(2-methoxyethoxy)-2-[2-(1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494773-57-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(4-morpholinyl)-2-[2-(1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & & & & & \\ H_2N-C-NH & S & & & & \\ H_2N-C & & & & \\ O & & & CH_2 \\ & & & CH_2 \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ &$$

RN 494773-59-0 HCAPLUS

CN

3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-(2-hydroxyethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 494773-61-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[(3R)-tetrahydro-3-furanyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 494773-62-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[(3S)-tetrahydro-3-furanyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 494773-64-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[(tetrahydro-2H-pyran-4-yl)oxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
0\\
H_2N-C-NH\\
H_2N-C\\
\end{array}$$

RN 494773-66-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-(cyclopropylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ 0 & & \\ H_2N-C-NH & & S \\ & & & \\ H_2N-C & & \\ & & & \\ & & & \\ \end{array}$$

RN 494773-68-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-(cyclopentyloxy)phenyl]- (9CI) (CA INDEX NAME)

RN 494773-70-5 HCAPLUS

CN

3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494773-73-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[(1-ethyl-3-pyrrolidinyl)oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494773-77-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-(3-pyrrolidinyloxy)phenyl]- (9CI) (CA INDEX NAME)

RN 494773-80-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[(2S)-1-methyl-2-pyrrolidinyl]methoxy]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 494773-82-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[1-(2-methoxyethyl)-

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3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494773-84-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[(2R)-1-methyl-2-pyrrolidinyl]methoxy]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 494773-87-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(2,2,6-trimethyl-1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494773-90-9 HCAPLUS

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CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[5-chloro-2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

RN 494773-92-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-fluoro-2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494773-94-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4,5-difluoro-2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494773-96-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[5-methyl-2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ \text{Me} & & & \\ & & & \\ & & & \\ & & & \\$$

RN 494773-98-7 HCAPLUS

CN

3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[5-cyano-2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494774-00-4 HCAPLUS

15:1412/14/2006Page 183

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[5-methoxy-2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494774-02-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3,5-difluoro-2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494774-04-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[3-methoxy-2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O \\ \parallel \\ C-NH_2 \\ \hline \\ NH-C-NH_2 \\ \parallel \\ O\\ O\\ O\\ I-Pr \end{array}$$

RN 494774-06-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]-5-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 494774-08-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]-4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 494774-10-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-methoxy-2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

RN 494774-12-8 HCAPLUS.

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[5-fluoro-2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494774-14-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[1-(1-methylethyl)-3-pyrrolidinyl]oxy]-3-(4-morpholinylmethyl)phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

RN 494774-16-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[[1-(cyclopropylmethyl)-3-pyrrolidinyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494774-18-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[(1-cyclopropyl-3-pyrrolidinyl)oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494774-21-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(4-fluoro-1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494774-23-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[(1-methyl-4-piperidinyl)oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494774-25-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[(1-methyl-3-pyrrolidinyl)oxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494774-27-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(4-morpholinylacetyl)phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
0 \\
H_2N-C-NH
\end{array}$$

$$\begin{array}{c|c}
C-CH_2-N
\end{array}$$

RN 494774-28-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(4-hydroxy-1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494774-30-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(2,2,6,6-tetramethyl-1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494774-32-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(2,5-dihydro-1H-pyrrol-1-yl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 494774-34-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[2-(2,5-dihydro-2,5-dimethyl-1H-pyrrol-1-yl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} \\ & \text{O-CH}_2\text{-CH}_2\text{--N} \\ & \text{Me} \\ & \text{S} \\ & \text{NH-C-NH}_2 \\ & \text{O} \end{array}$$

RN 494774-36-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[(2S)-2-(methoxymethyl)-1-pyrrolidinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 494774-37-7 HCAPLUS

CN 4-Piperidinecarboxamide, 1-[[4-[4-(aminocarbonyl)-5-[(aminocarbonyl)amino]-2-thienyl]phenyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O \\ H_2N-C-NH \\ H_2N-C \\ 0 \\ \end{array}$$

RN 494774-38-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[3-(hydroxymethyl)-1-piperidinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$H_2N-C-NH$$
 $S$ 
 $H_2N-C$ 
 $H_2N-C$ 
 $H_2N-C$ 
 $H_2N-C$ 

RN 494774-39-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[[4-(hydroxymethyl)-1-piperidinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O \\ H_2N-C-NH \\ H_2N-C \\ 0 \\ \end{array}$$

RN 494774-40-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[3-(4-morpholinyl)-1-pyrrolidinyl]phenyl]- (9CI) (CA INDEX NAME)

RN 494774-43-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-[4-(2-methoxyethyl)-1-piperazinyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{MeO-CH}_2\text{--CH}_2 \\ \text{O} \\ \text{H}_2\text{N-C-NH} \\ \text{H}_2\text{N-C} \\ \text{O} \\ \end{array}$$

RN 494774-45-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[2-(1S,4S)-2,5-diazabicyclo[2.2.1]hept-2-ylphenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 494775-33-6 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[[2-[4-(aminocarbonyl)-5-[(aminocarbonyl)amino]-2-thienyl]phenyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

15:1412/14/2006Page 192

IT 494772-79-1P, 2-[(Aminocarbonyl)amino]-5-(2-formylphenyl)-3thiophenecarboxamide 494773-25-0P, 2-[(Aminocarbonyl)amino]-5-(4formylphenyl)thiophene-3-carboxamide 494773-36-3P, 2-[(Aminocarbonyl)amino]-5-[2-(4-tert-butyloxycarbonylpiperazin-1yl)phenyl]thiophene-3-carboxamide 494773-40-9P, 2-[(Aminocarbonyl)amino]-5-[2-[3-(N-tert-butyloxycarbonyl-Nmethylamino)pyrrolidin-1-yl]phenyl]thiophene-3-carboxamide RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of ureido-carboxamido thiophenes as inhibitors of IKK2 kinase) RN 494772-79-1 HCAPLUS CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(2-formylphenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & OHC \\ H_2N-C-NH & S \\ H_2N-C & H_2N-C \\ O & OHC \\ OHC \\ O & OHC \\ OHC \\ OHC \\ O & OHC \\ O$$

RN 494773-25-0 HCAPLUS
CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-formylphenyl)- (9CI)
(CA INDEX NAME)

$$H_2N-C-NH$$
 $H_2N-C$ 
 $H_2N-C$ 
 $H_2N-C$ 

RN 494773-36-3 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[2-[4-(aminocarbonyl)-5-[(aminocarbonyl)amino]-2-thienyl]phenyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 494773-40-9 HCAPLUS

CN Carbamic acid, [1-[2-[4-(aminocarbonyl)-5-[(aminocarbonyl)amino]-2-thienyl]phenyl]-3-pyrrolidinyl]methyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & &$$

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN

3

ACCESSION NUMBER: 2002:293385 HCAPLUS

DOCUMENT NUMBER: 136:325411

TITLE: Preparation of 2-aminothiophene-3-carboxamides as

NF-κB inhibitors

INVENTOR(S): Callahan, James F.; Roshak, Amy K. PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA

SOURCE: PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

15:1412/14/2006Page 194

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                         A2
                                20020418
                                            WO 2001-US31866
                                                                   20011012
    WO 2002030353
                         A3
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             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
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                                            EP 2001-979731
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            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP 2004523476
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                                            US 2003-398847
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                                                                   20050928 <--
PRIORITY APPLN. INFO.:
                                            US 2000-239759P
                                                                P
                                                                   20001012
                                            WO 2001-US31866
                                                                W
                                                                   20011012
                                            US 2003-398847
                                                                B1 20030410
OTHER SOURCE(S):
                         MARPAT 136:325411
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GI

The title compds. [I; R1 = NR5R6; R2 = CONH2, SO2NH2; R3 = H, halo; R4 = aryl, heteroaryl; R5 = H, alkyl; R6 = H, COalkyl, SO2alkyl, etc.], useful as inhibitors of IKK- $\beta$  phosphorylation of IkB, were prepared Thus, treating (4-fluorophenyl)ethanol with PCC in CH2Cl2 followed by reacting the resulting (4-fluorophenyl)acetaldehyde with sulfur and 2-cyanoacetamide in the presence of Et3N in DMF afforded 2-amino-5-(4-fluorophenyl)thiophene-3-carboxamide. IT 106666-34-6P 106666-36-8P 412914-36-4P 412914-37-5P 412914-52-4P 412914-54-6P 412914-57-9P 412914-58-0P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of 2-aminothiophene-3-carboxamides as NF-κB inhibitors) RN106666-34-6 HCAPLUS CN 3-Thiophenecarboxamide, 2-[[(methylamino)carbonyl]amino]-5-phenyl- (9CI) (CA INDEX NAME)

Ph S NH-C-NHMe 
$$C-NH_2$$
  $C-NH_2$   $C-NH_2$ 

RN 106666-36-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[[[(1-methylethyl)amino]carbonyl]amino]-5-phenyl-(9CI) (CA INDEX NAME)

RN 412914-36-4 HCAPLUS

CN 3-Thiophenecarboxamide, 5-(3-chlorophenyl)-2-[[(methylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O & & & \\
MeNH-C-NH & S & & \\
H_2N-C & & & \\
0 & & & \\
\end{array}$$

RN 412914-37-5 HCAPLUS

CN 3-Thiophenecarboxamide, 5-(4-fluorophenyl)-2-[[(methylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)

## 10568380.trn

RN 412914-52-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[[(ethylamino)carbonyl]amino]-5-phenyl- (9CI) (CA INDEX NAME)

RN 412914-54-6 HCAPLUS

CN 3-Thiophenecarboxamide, 5-(2-fluorophenyl)-2-[[(methylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 412914-57-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[[(methylamino)carbonyl]amino]-5-(4-methylphenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O & Me \\
MeNH-C-NH & S \\
H_2N-C & O \\
O & O \\
\end{array}$$

RN 412914-58-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(3-chloro-4-fluorophenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
C1 & F \\
H_2N-C-NH & S & F \\
H_2N-C & G & G & G \\
\end{array}$$

L10 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:597977 HCAPLUS

DOCUMENT NUMBER: 135:180698

TITLE: Preparation of thiophenecarboxamides as inhibitors of

the enzyme IKK-2

INVENTOR(S): Baxter, Andrew; Brough, Stephen; Faull, Alan;

Johnstone, Craig; Mcinally, Thomas

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.

SOURCE: PCT Int. Appl., 85 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PAT	PATENT NO.			DATE	APPLICATION NO.	DATE
WO	WO 2001058890			20010816	WO 2001-SE248	20010207
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					EE, ES, FI, GB, GD,	
					KG, KP, KR, KZ, LC,	
					MW, MX, MZ, NO, NZ,	
					TM, TR, TT, TZ, UA,	
		ZA, ZW		511, 52, 10,	11., 11., 11, 12, 011,	00, 05, 02, 11,
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					GW, ML, MR, NE, SN,	
CA	2396824				CA 2001-2396824	
ЕP	1261600				EP 2001-902951	
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•				FI, RO, MK,		,,,
BR	20010081	43	Α	20030121	BR 2001-8143	20010207
JP	20035227	66	T2	20030729	JP 2001-558440 AT 2001-902951	20010207
AT	266019		E	20040515	AT 2001-902951	20010207
			Α	20040528	NZ 2001-519947	
PT	1261600		T	20040831	PT 2001-902951	20010207
ES	2218376		Т3	20041116		
AU	781047		B2	20050505	AU 2001-30705	20010207
US	20021072	52	A1	20020808	US 2002-868884	20020205 <
ZA	20020053		Α		ZA 2002-5300	20020702
NO 2002003786			Α	20020923	NO 2002-3786	20020809
PRIORITY APPLN. INFO.:					GB 2000-3154	A 20000212
•		•		•	WO 2001-SE248	W 20010207
OTHER SOURCE(S):			MARP	AT 135:1806	98	

GΙ

AB The title compds. [I; A = 5-membered heteroarom. ring containing 1-2 heteroatoms selected from O, N or S; R1 = (un)substituted Ph, 5-7 membered heteroarom. ring containing 1-3 heteroatoms selected from O, N or S; R2 = H, halo, CN, etc.; X = O, S], useful in the treatment or prophylaxis of inflammatory disease, were prepared Thus, refluxing 3-amino-5-phenyl-2-thiophenecarboxamide with trimethylsilyl isocyanate in DMF/CH2Cl2 afforded TT.

IT 354811-31-7P

RN

IT

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of thiophenecarboxamides as inhibitors of the enzyme IKK-2) 354811-31-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-4-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O \\
H_2N-C-NH \\
H_2N-C \\
Me
\end{array}$$

354811-10-2P 354811-28-2P 354811-29-3P

354811-30-6P 354811-32-8P 354811-33-9P 354811-34-0P 354811-35-1P 354811-36-2P 354811-37-3P 354811-38-4P 354811-39-5P 354811-40-8P 354811-41-9P 354811-42-0P 354811-48-6P 354811-49-7P 354811-50-0P 354811-51-1P 354811-52-2P 354811-54-4P 354811-56-6P 354811-58-8P 354811-59-9P 354811-60-2P 354811-66-8P 354811-67-9P 354811-68-0P 354811-79-3P 354811-80-6P 354811-81-7P 354811-82-8P 354811-83-9P 354811-84-0P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of thiophenecarboxamides as inhibitors of the enzyme IKK-2) RN354811-10-2 HCAPLUS 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-phenyl- (9CI) (CA CN

INDEX NAME)

## 10568380.trn

IT 354812-11-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of thiophenecarboxamides as inhibitors of the enzyme IKK-2)

RN 354812-11-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-(9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ \parallel \\ H_2N-C-NH \\ \end{array} \begin{array}{c} S \\ \parallel \\ O \end{array} \begin{array}{c} OMe \\ \end{array}$$

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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FULL ESTIMATED COST	79.08	414.49
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
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CA SUBSCRIBER PRICE	-9.75	-9.75

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RN 354811-28-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-chlorophenyl)-4-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & & Cl \\ H_2N-C-NH & S & & \\ H_2N-C & & Me & \\ & & & \\ O & & & \end{array}$$

RN 354811-29-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-4-methyl-5-(4-methylphenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & & \\ H_2N-C-NH & S & \\ H_2N-C & & Me \\ \hline \\ O & & \\ \end{array}$$

RN 354811-30-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-4-ethyl-5-phenyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ || \\ H_2N-C-NH \\ \\ H_2N-C \\ || \\ O \end{array}$$
 Et

RN 354811-32-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-fluorophenyl)-4-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & & F \\ H_2N-C-NH & S & & \\ H_2N-C & & Me \\ & & & \\ O & & & \\ \end{array}$$

RN 354811-33-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(3-fluorophenyl)-4-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & \\ \parallel & \\ H_2N-C-NH & S \\ \hline & H_2N-C & Me \\ \parallel & O \end{array}$$

RN 354811-34-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(3-methoxyphenyl)-4-methyl- (9CI) (CA INDEX NAME)

RN 354811-35-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(3-chloro-4-methoxyphenyl)-4-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & & & \\ & & & \\ H_2N-C-NH & & & \\$$

RN 354811-36-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(2-chlorophenyl)-4-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & C1 \\ \parallel & S \\ H_2N-C-NH & S \\ \parallel & & Me \\ \parallel & & O \end{array}$$

RN 354811-37-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-4-methyl-5-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O \\
H_2N-C-NH \\
H_2N-C \\
H_2O-C \\
O\end{array}$$
Me

RN 354811-38-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-methoxy-3-methylphenyl)-4-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & Me \\ H_2N-C-NH & S & \\ H_2N-C & Me \\ & & \\ O & \\ \end{array}$$

RN 354811-39-5 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(3,5-dimethoxyphenyl)-4-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ O \\ H_2N-C-NH \\ \\ H_2N-C \\ \\ O \\ \end{array} \qquad \begin{array}{c} OMe \\ \\ \\ OMe \\ \end{array}$$

RN 354811-40-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(2,3-dimethoxyphenyl)-4-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O \\ \parallel \\ H_2N-C-NH \\ H_2N-C \\ \parallel \\ O \end{array} \qquad \begin{array}{c} O \\ Me \end{array} \qquad \begin{array}{c} O \\ O \\ Me \end{array}$$

RN 354811-41-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-4-methyl-5-[4-(1-methylethyl)phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & & \\ H_2N-C-NH & S & & \\ H_2N-C & & Me & \\ & & & \\ O & & & \end{array}$$

RN 354811-42-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-4-methyl-5-(3,4,5-trimethoxyphenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & O \\ \parallel & O \\ H_2N-C-NH & S \\ \hline & O \\ \end{array}$$

RN 354811-48-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(3,4-dichlorophenyl)-4-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
C1 \\
C1 \\
H_2N-C-NH \\
H_2N-C \\
Me
\end{array}$$

RN 354811-49-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-cyanophenyl)-4-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O & & CN \\
H_2N-C-NH & S & \\
H_2N-C & Me & \\
O & & \\
\end{array}$$

RN 354811-50-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-hydroxyphenyl)-4-methyl- (9CI) (CA INDEX NAME)

$$H_2N-C-NH$$
 S  $H_2N-C$   $Me$ 

RN 354811-51-1 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-4-methyl-5-[4-[2-(1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O \\ H_2N-C-NH \\ H_2N-C \\ O \end{array} \qquad \begin{array}{c|c} O-CH_2-CH_2-N \\ Me \\ O \end{array}$$

RN 354811-52-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(diethylamino)ethoxy]phenyl]-4-methyl- (9CI) (CA INDEX NAME)

$$H_2N-C$$
 $H_2N-C$ 
 $H_2$ 
 $H_2$ 
 $H_2$ 
 $H_3$ 
 $H_4$ 
 $H_4$ 
 $H_5$ 
 $H_5$ 
 $H_6$ 
 $H_6$ 
 $H_6$ 
 $H_6$ 
 $H_6$ 

## 10568380.trn

RN 354811-54-4 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-phenyl-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 354811-56-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-4-methyl-5-phenyl- (9CI) (CA INDEX NAME)

Ph S NH-C-NH<sub>2</sub>

Me C-NH<sub>2</sub>

$$\parallel$$

O

RN 354811-58-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-cyanophenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
0 & CN \\
H_2N-C-NH & S \\
H_2N-C & CN \\
0 & O
\end{array}$$

RN 354811-59-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

10568380.trn

$$\begin{array}{c} O \\ \parallel \\ H_2N-C-NH \\ H_2N-C \\ \parallel \\ O \end{array}$$

RN 354811-60-2 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(2,4-difluorophenyl)-(9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ \parallel \\ H_2N-C-NH \\ H_2N-C \\ \parallel \\ O \end{array}$$

RN 354811-66-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-hydroxyphenyl)-(9CI) (CA INDEX NAME)

$$H_2N-C-NH$$
 $H_2N-C$ 
 $H_2N-C$ 
 $H_2N-C$ 

RN 354811-67-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-(4-chlorophenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O & & & & C1 \\
H_2N-C-NH & S & & & \\
H_2N-C & & & & \\
& & & & & \\
& & & & & \\
\end{array}$$

RN 354811-68-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(methylsulfonyl)phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ \parallel \\ H_2N-C-NH \\ \downarrow \\ O \\ \end{array}$$

RN 354811-79-3 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ H_2N-C-NH \\ H_2N-C \\ \end{array}$$

RN 354811-80-6 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(2,2,6,6-tetramethyl-1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 354811-81-7 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-(4-thiazolylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 354811-82-8 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(dimethylamino)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

RN 354811-83-9 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(diethylamino)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ H_2N-C-NH \\ H_2N-C \\ || O \end{array}$$

RN 354811-84-0 HCAPLUS

CN 3-Thiophenecarboxamide, 2-[(aminocarbonyl)amino]-5-[4-[2-(4-morpholinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

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